

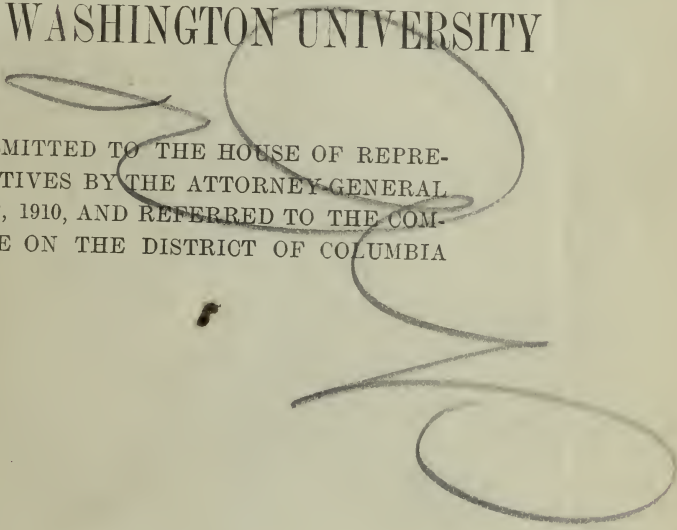


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HOUSE COMMITTEE ON THE DISTRICT OF COLUMBIA
SIXTY-FIRST CONGRESS, SECOND SESSION

A REPORT OF
AN INVESTIGATION OF THE FINANCIAL
AND EDUCATIONAL AFFAIRS OF THE
GEORGE WASHINGTON UNIVERSITY

TRANSMITTED TO THE HOUSE OF REPRESENTATIVES BY THE ATTORNEY GENERAL
JUNE 2, 1910, AND REFERRED TO THE COMMITTEE ON THE DISTRICT OF COLUMBIA



Printed for use of the Committee

WASHINGTON
GOVERNMENT PRINTING OFFICE

1910



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GEORGE WASHINGTON UNIVERSITY.

LETTER FROM THE ATTORNEY-GENERAL, TRANSMITTING A REPORT OF
AN INVESTIGATION OF THE FINANCIAL AND EDUCATIONAL AFFAIRS
OF THE GEORGE WASHINGTON UNIVERSITY.

DEPARTMENT OF JUSTICE,
OFFICE OF THE ATTORNEY-GENERAL,
Washington, D. C., June 2, 1910.

SIR: On April 25, 1910, the following resolution was adopted by the
House of Representatives:

Whereas the bill H. R. 24316 designates the George Washington University as an
institution to administer the appropriations of the Morrill acts as extended by said
bill to the District of Columbia; and

Whereas statements have been made in the hearings on H. R. 12343 and in the
public press regarding the use of the funds of the institution, the original Boutell bill,
and in consideration of the provision made in section ten of the original charter of
George Washington University, adopted February ninth, eighteen hundred and
twenty-one, which, after providing that the trustees of the university shall keep
accurate records of its proceedings and financial management, further provides that
"the said book or journal shall at all times be open to the inspection or examination
of the Attorney-General of the United States; and when required by either House of
Congress it shall be the duty of said trustees to furnish information respecting their
own conduct, the state of the institution, and of its finances, which shall or may be
so required:" Therefore be it

Resolved, That the House of Representatives hereby requests the Attorney-General
of the United States to conduct a careful investigation of the financial and educational
affairs of the said George Washington University, and to furnish the House with
detailed report covering a period of at least the last ten years as to the receipts, invest-
ments, and expenditures of the university in each of its departments; said report to
be especially explicit as to the departments of engineering, architecture, veterinary
medicine, and pharmacy on the following points: First, amount the university has
invested in buildings in each of these departments, or number of rooms used for each
department; second, detailed statement of items of equipment of each of these depart-
ments; third, actual class enrollment for the past three years in each subject taught
in each of these departments; fourth, salaries paid the individual professors of each
of these departments, and the charges made students for laboratory fees in these
departments.

The only investigation which I have felt competent to conduct pur-
suant to this resolution was an examination into the financial affairs of
the university, as it has been uniformly held by my predecessors that
the Attorney-General can not undertake to investigate and report
upon questions of fact, even for the head of one of the other depart-
ments of the Government (17 Op., 436; 19 Op., 465; 20 Op., 253-384;
23 Op., 231); and on several occasions my predecessors have declined
to conduct investigations at the request of either House of Congress,
on the ground that such investigations were beyond their power under
the statutes (1 Op., 335; 6 Op., 680, 684; 14 Op., 17-178; 10 Op.,
164).

However, in the act of February 9, 1821, incorporating the Columbian College in the District of Columbia (6 Stat., pp. 255-258), the name of which was subsequently changed, pursuant to the authority of Congress, to "The George Washington University," it is provided in the tenth section that it shall be the duty of the board of trustees to keep certain books of account, which shall—

at all times be open to the inspection or examination of the Attorney-General of the United States; and, when required by either House of Congress, it shall be the duty of the said trustees to furnish any information respecting their own conduct, the state of the institution, and of its finances which shall or may be so required.

Interpreting this section to impose on me a duty of investigation into the books of account and finances of the university when so requested by the House of Representatives, I have caused an examination into those matters to be undertaken by the bureau of investigation of this department, and I transmit to you herewith a preliminary report, which I will supplement when completed by a more thorough and detailed report into those financial matters. This will, however, require considerable time to complete. Upon its receipt I transmitted to the board of trustees of the university a copy of the resolution of the House, above referred to, and requested them to furnish me for the House with the detailed reports called for in the resolution.

The preliminary report of the financial condition submitted herewith shows that the assets of the university, as of April 27, 1910, taking the real estate at its assessed valuation for the purposes of taxation and the books and equipment at the valuation fixed by the trustees, and without regard to the application of such assets to particular trust funds, aggregate \$801,996.41, while the total indebtedness of the university to third parties, as of the said date, amounts to \$542,310.44.

There was no appropriation available to this department which would permit me to procure expert testimony as to the actual market value of the real estate, and I have therefore taken in said report the valuation at which said real estate is appraised for the purposes of taxation in the District of Columbia, as above stated.

The preliminary report also shows the condition of the respective endowment and trust funds and the total cash receipts and disbursements, from which it will appear that the expenses of the university since December 31, 1899, have exceeded its income by the sum of \$458,302.48, which amount was partly provided out of the Corcoran endowment fund.

The trustees of the university have furnished me, and I transmit to you herewith, a report dated May 19, 1910, accompanied by six exhibits, numbered from 1 to 6, inclusive, and an inventory and appraisement of furniture and equipment.

I have the honor to be, very respectfully, yours,

GEORGE W. WICKERSHAM,
Attorney-General.

THE SPEAKER OF THE HOUSE OF REPRESENTATIVES.

PRELIMINARY REPORT OF FINANCIAL CONDITION OF THE
GEORGE WASHINGTON UNIVERSITY, WASHINGTON, D. C.

By NELSON B. KEYSER and SHERRILL SMITH, *special bank accountants.*

WASHINGTON, D. C., May 17, 1910.

The ATTORNEY-GENERAL,
Washington, D. C.

SIR: Pursuant to your instructions, communicated through the chief of the bureau of investigation under date of April 27, 1910, we presented your letter dated April 26, 1910, to President Needham, of the George Washington University, and thereupon took possession of the books and records of the institution and began the investigation mentioned in said letter. The verification of the cash balances and the statements of assets and liabilities of the university hereinafter set out were made as of the close of business April 27, 1910.

The accounts prior to the year 1903 were kept in the form of cash books, journals, and ledgers. In 1903 this system was discarded and a very complete system of "cash sheets" adopted. These show in detail all receipts and expenditures classified under numerous headings. From these sheets monthly and yearly abstracts or statements are prepared and the whole bound together at the end of each fiscal year. No other books have been kept, but the necessary supplemental books can be prepared at any time from the information contained in these "cash sheets."

The disposition of all money received during the period covered by this report from the sale of property or securities belonging to the university or to the Corcoran or other trust funds is shown in the accounts kept. All payments appear to have been made by the proper officers in the conduct of the business of the university, and with the knowledge and consent of the trustees.

In addition to the books and "cash sheets" above mentioned there are complete "record" or minute books of the trustees from 1821 to date; also minute books of the executive committee. There are also printed copies of the treasurer's annual reports covering the period from June 1, 1875, to August 31, 1909, which contain, in addition to the accounts of receipts and expenditures, schedules showing the assets of the university and its various endowment funds.

In compliance with your further instructions to prepare at the earliest practicable moment a preliminary report showing the present financial condition of the institution, and dealing more particularly with the Corcoran endowment and other trust funds, including the congressional land grant, we have the honor to submit the following preliminary report:

The detailed statement of the receipts and expenditures of the university in each of its departments called for by the resolution of

the House of Representatives will involve considerable detail work and will be treated with in a later report. In the present report we start with the figures contained in the treasurer's annual report for the fiscal year ending December 31, 1899, as a basis, and trace the various transactions involving the trust funds up to date. An investigation into the origin of the various funds, which it is proposed to make later, may involve some changes in the figures given in the treasurer's report for the year ending December 31, 1899, but for the present they will be accepted as correct.

As a result of our investigation, we submit the following statement of the liabilities and assets of the university as of April 27, 1910, together with a list of the assets now held in the Corcoran endowment and other trust funds:

STATEMENT OF LIABILITIES OF GENERAL FUND OF GEORGE WASHINGTON UNIVERSITY,
APRIL 27, 1910.

| | | |
|---|--------------|-------------------|
| Mortgage indebtedness..... | \$450,000.00 | |
| Due to banks..... | 61,500.00 | |
| Unpaid bills..... | 9,395.47 | |
| Salaries accrued to April 27, 1910..... | 10,731.19 | |
| Accrued interest on borrowed money..... | 10,279.21 | |
| Taxes for 1910..... | 404.57 | |
| Due to Corcoran endowment and other trust funds for money borrowed since December 31, 1899..... | \$202,014.85 | |
| Amount due Corcoran fund December 31, 1899..... | 40,000.00 | |
| | | 242,014.85 |
| Due to Alumni Hall fund..... | | 4,200.00 |
| Proceeds of sale of lots granted by Congress..... | \$70,872.93 | |
| Less amount authorized by act of Congress February 28, 1839, to be used for payment of the then existing debts.. | 7,000.00 | |
| | | 63,872.93 |
| | | <u>852,398.22</u> |

For the purpose of preparing this report the liabilities of the university and the assets of the Corcoran endowment fund and other trust funds have been taken at the amounts stated in the treasurer's report for the year ending December 31, 1899.

In order to arrive at the exact amounts of these various funds it will be necessary to trace them from their inception to the date of treasurer's report of December 31, 1899.

The balance of the Corcoran fund is given in that report as \$181,326.59, but it is probable that the result of a complete audit will be to increase this amount at least \$10,000, with a corresponding increase of the amount due from the general fund to the Corcoran endowment fund.

In addition thereto there are a number of small scholarship and prize funds which were not shown in the treasurer's report of December 31, 1899, the investments of which had consisted largely of Chesapeake and Ohio Canal bonds, which were believed at that time to be worthless. These bonds were sold on January 4, 1904, for \$3,510, and the amount realized therefrom is included in the amount \$202,014.85. These funds are as follows:

| | | |
|---|-------------|-----------------|
| Elton professorship fund, now said to be..... | \$14,000.00 | |
| Carried in the 1899 report as..... | 5,000.00 | |
| | | \$9,000.00 |
| Kendall scholarship fund, now said to be..... | 6,000.00 | |
| Carried in 1899 report as..... | 4,875.00 | |
| | | <u>1,125.00</u> |

Also the following, not shown in the 1899 report:

| | |
|--|--------------|
| H. H. Carter scholarship..... | \$5, 000. 00 |
| Farnham scholarship..... | 1, 000. 00 |
| Davis scholarship..... | 1, 000. 00 |
| M. M. Carter scholarship..... | 1, 000. 00 |
| Staughton prize fund..... | 250. 00 |
| Elton prize fund..... | 250. 00 |
| Ruggles prize fund..... | 500. 00 |
| | <hr/> |
| | 19, 125. 00 |
| Less amount charged above for amount received from sale of Chesapeake and Ohio Canal bonds..... | 3, 510. 00 |
| | <hr/> |
| | 15, 615. 00 |

The early records of the Columbian College show the following scholarship funds which are no longer carried as a liability:

| | |
|--|--------------|
| Walker scholarship, endowed July 19, 1824..... | \$2, 500 |
| Withington scholarship, endowed December 13, 1826..... | 1, 550 |
| | <hr/> |
| | \$2, 040. 00 |

The liability of the university to the building site and enlargement fund depends upon the construction placed upon the terms of the subscription. The trustees regard the subscriptions as being made one-half for "building and site" and one-half for "enlargement of the educational work" or general expenses.

| | |
|---|---------------|
| Under this construction there would be a liability to replace in the building site and enlargement fund, one-half of \$36,003.77, or..... | \$18, 001. 88 |
| In the account above stated the general fund is charged with receiving the amount of subscriptions and interest..... | \$36, 003. 77 |
| Less payments from fund for expenses..... | 16, 042. 08 |
| | <hr/> |
| | 19, 961. 69 |
| Therefore, if the position the trustees take is correct, the amount to be restored by the general fund as above will be reduced by the sum of.. | 1, 959. 81 |

On the other hand, if the whole fund is to be treated as for a building and site, then the general fund should restore the sum of \$16,042.08 paid out of the building site and enlargement fund for expenses in addition to the amounts above found.

Assets of general fund of The George Washington University.

[Available for payment of liabilities.]

APRIL 27, 1910.

| | |
|--|----------------|
| Cash in hands of the treasurer..... | \$2, 270. 42 |
| Cash deposited in banks..... | 12, 846. 27 |
| | <hr/> |
| | \$15, 116. 69 |
| Withdrawal value of perpetual fire-insurance policies..... | 3, 003. 75 |
| Due from hospital pay patients (estimated amount collectible)..... | 1, 500. 00 |
| Claim against Board of Charities for treatment of charity patients during fiscal years ending June 30, 1908, and June 30, 1909 (dependent upon congressional appropriation)..... | 1, 335. 00 |
| Books in library (at the valuation fixed by trustees)..... | 37, 000. 00 |
| Equipment owned (at the valuation fixed by trustees)..... | 73, 101. 01 |
| Real estate: | |
| University and law halls, Fifteenth and H streets, lot containing 20,200 square feet, assessed valuation of... | \$357, 520. 00 |
| Medical hall and hospital, H street, between Thirteenth and Fourteenth, lot containing 24,536 square feet, assessed valuation of..... | 215, 049. 00 |
| | <hr/> |
| | 572, 569. 00 |
| | <hr/> |
| | 703, 625. 45 |

The values extended in the above statement to the items of "Books in library" and "Equipment owned" are those fixed in the inventory and appraisal submitted by the trustees to the Attorney-General. For the real estate the assessed values are used, as we do not feel that we are qualified to fix the present market value of the same.

Assets of Corcoran endowment fund and other trust funds.

[Not available for payment of liabilities.]

| | Market value. | Cost. |
|---|---------------|------------|
| 6 shares American Telegraph and Telephone Co. stock | \$819.00 | \$600.00 |
| 130 shares Washington Sanitary Improvement Co. stock | 1,300.00 | 1,300.00 |
| \$5,000 C., R. I. & P. Ry. Co. collateral trust 4 per cent bonds | 3,875.00 | 4,118.75 |
| Do | 3,875.00 | 4,060.97 |
| \$24,000 C., R. I. & P. Ry. Co. refunding 4 per cent bonds | 21,240.00 | 20,959.17 |
| | 31,109.00 | 31,038.89 |
| Note C. W. and C. M. Needham, secured by deed of trust on part of lot 27, square 159 (1710 N street), interest 4 per cent | | 16,000.00 |
| Note Thos. R. Marshall, secured by deed of trust on part of lot 5, square 253 (Losekam's café, 1323 F street), and lot 70, block 30, Columbia Heights (part of a loan of \$53,000), interest 5 per cent | | 5,000.00 |
| Note Lewis Spectre, secured by deed of trust on lot 64, square 1017 (part of a loan of \$1,800), interest 5 per cent | | 200.00 |
| Cash in banks | | 238.07 |
| Due from general fund (see list of liabilities of general fund) | | 246,214.85 |
| | | 298,691.81 |
| Real estate: | | |
| Admiral Powell house (1707 I street), assessed value | 18,923.00 | |
| Vacant lot (sublot 148, square 672, containing 3,000 square feet), assessed value | 1,350.00 | |
| | | 20,273.00 |

Assets of the congressional professorship fund.

[Not available for payment of liabilities.]

| | |
|--|-------------|
| Amount due from general fund. (Proceeds of sale of lots. See statement of liabilities of general fund) | \$63,872.93 |
| Real estate: | |
| Lot 8, square 13 (assessed value) | \$2,565.00 |
| Lot 10, square 13 | 2,218.00 |
| Lot 12, square 13 | 4,588.00 |
| Lot 13, square 13 | 3,924.00 |
| Lot 9, square 16 | 2,224.00 |
| Lot 8, square 23 | 3,055.00 |
| Lot 2, square W. of 23 | 1,069.00 |
| Lot 5, square 83 | 3,590.00 |
| Lot 5, square 87 | 1,896.00 |
| Lot 2, square 88 | 492.00 |
| | 25,621.00 |
| | 89,493.93 |

No valuation is extended on the above real estate for the reason that we do not feel that we are qualified to set a valuation on the same.

For the purpose of showing, in a brief summary, the proportion of receipts to expenditures for the last ten years, thereby showing the deficit in current running expenses, the following schedule is given:

The present indebtedness of the university, so far as ascertained, is as follows:

| | |
|--|--------------|
| Mortgage on university and law halls and medical school and hospital, held by Fidelity Trust Co., of Philadelphia..... | \$450,000.00 |
| Indebtedness to banks for borrowed money..... | 61,500.00 |
| Unpaid bills for February, March, April..... | 9,395.47 |
| Salaries to April 27, 1910..... | 10,731.19 |
| Accrued interest on mortgage and other borrowed money..... | 10,279.21 |
| Taxes for 1910..... | 404.57 |
| | <hr/> |
| | 542,310.44 |
| From this deduct total indebtedness as shown by treasurer's report, December 31, 1899..... | 164,652.50 |
| | <hr/> |
| Increase in indebtedness since December 31, 1899..... | 377,657.94 |
| To which should be added amounts transferred from Corcoran endowment and trust funds since December 31, 1899..... | 202,014.85 |
| Amount received from sale of government lots since December 31, 1899.. | 8,533.03 |
| Amount transferred from alumni hall fund..... | 4,200.00 |
| Amount received from sale of Cutler house (222 Third street)..... | 14,300.00 |
| Amount received from Denman estate (bequest for law school)..... | 8,179.32 |
| | <hr/> |
| | 614,885.14 |
| From this should be deducted the cost of new medical school and addition to hospital..... | 156,582.66 |
| | <hr/> |
| | 458,302.48 |

The balance, amounting to \$458,302.48, has been absorbed by the excess of expenditures over ordinary current receipts. Part of this is represented by additional equipment, but the larger portion of it was used for ordinary running expenses.

Because of the intermingling of the various funds and the purchase of investments with funds belonging not only to the Corcoran endowment and other trust funds, but to the fund known as the building site and enlargement fund, it has been found necessary to treat all receipts and expenditures of these funds together in one statement rather than to attempt to show the proportionate ownership in different securities.

The assets of the Corcoran endowment and other trust funds as shown by the treasurer's report, December 31, 1899, were as follows:

| | |
|---|--------------|
| Corcoran endowment fund: | |
| Mortgage note, A. M. McLachlen..... | \$3,000.00 |
| Mortgage note, Power & Peterson..... | 10,000.00 |
| Mortgage note, J. H. Lane..... | 2,400.00 |
| Real estate: | |
| Old law building site..... | 50,000.00 |
| Columbian Building construction..... | 99,106.30 |
| Unimproved lots..... | 40,000.00 |
| 903 M street..... | 7,910.57 |
| 1719 S street..... | 9,118.83 |
| Burgdorf lots..... | \$13,354.65 |
| Less sold Mrs. Lenman..... | 7,000.00 |
| | <hr/> |
| | 6,354.65 |
| Cash on hand..... | 97.74 |
| | <hr/> |
| | 227,988.09 |
| Less discounts at National Metropolitan Bank..... | 46,661.50 |
| | <hr/> |
| | \$181,326.59 |
| Mary Lowell Stone scholarship fund, invested in mortgage note, J. B. Wimer..... | 2,000.00 |
| Davis prize fund, 5 shares Quinsigamond National Bank..... | 500.00 |
| Elton fund: | |
| Invested in mortgage note, J. B. Wimer..... | 5,000.00 |
| Willie E. Fitch fund: | |
| Cash in bank..... | \$250.67 |
| Invested in mortgage note, J. W. McLachlen..... | 1,200.00 |
| | <hr/> |
| | 1,450.67 |

Kendall fund:

| | | |
|--|--------------|---------------------|
| Invested in mortgage note, J. W. Hogg | \$1, 875. 00 | |
| Invested in mortgage note, J. B. Wimer | 3, 000. 00 | |
| | | <u>\$4, 875. 00</u> |

Miscellaneous:

| | | |
|--|-------------|---------------------|
| Penn. Tel. Company stock | 400. 00 | |
| \$13,000 Chesapeake and Ohio Canal bonds regarded as worthless.... | 00, 000. 00 | |
| | | <u>195, 552. 26</u> |

Included in the assets of the Corcoran endowment fund December 31, 1899, was an item "\$40,000, unimproved lots." These are the lots granted by Congress for the purpose of creating a professorship fund. They were carried into the Corcoran endowment fund to replace assets of the fund used for other purposes. Inasmuch as these lots are the subject of a special trust, to be separately accounted for, the real state of affairs at that time was, that the general fund was indebted to the Corcoran endowment fund in the sum of \$40,000 and that amount must therefore be deducted from the above assets.....

40, 000. 00

Making total amount of assets held by these funds December 31, 1899.....

155, 552. 26

To this must be added the following amounts received since that date for additional endowments:

| | | |
|--|--------------|----------------------|
| E. K. Cutter fund | \$1, 000. 00 | |
| Eleanor J. Cooper medical endowment | 8, 750. 00 | |
| National Park Seminary endowment..... | 500. 00 | |
| Dr. John Odroneaux endowment..... | 4, 792. 97 | |
| Thos. F. Walsh prize fund..... | 300. 00 | |
| Willie E. Fitch prize fund (additional)..... | 189. 94 | |
| Building site and enlargement fund..... | 36, 003. 77 | |
| Alumni hall fund (net)..... | 4, 335. 86 | |
| | | <u>\$55, 872. 54</u> |
| | | 211, 424. 80 |

To this must be also added the following amounts representing profits on trust investments:

| | | |
|--|--------------|----------------------|
| Amount received for 1719 S street in excess of cost to the Corcoran endowment fund..... | \$3, 451. 35 | |
| Amount received from sale of Burgdorf lots in excess of their cost to Corcoran endowment fund..... | 7, 749. 21 | |
| Amount received from sale of Columbian Building in excess of its cost to Corcoran endowment fund..... | 10, 093. 71 | |
| Amount received from Quinsigamond National Bank stock in excess of amount carried as Davis prize fund..... | 200. 00 | |
| Amount of profit on sale of Van Ness Park..... | 37, 956. 79 | |
| Amount of profit on sale of Memphis Union Station certificate..... | 572. 46 | |
| Profit on sale of \$15,000 worth of Chicago, Rock Island and Pacific collateral 4 per cent bonds..... | 1, 479. 89 | |
| Profit on sale of \$5,000 worth of Chicago, Rock Island and Pacific 5 per cent bonds of 1913..... | 506. 25 | |
| Received from sale of Chesapeake and Ohio bonds, regarded as worthless in 1899..... | 3, 510. 00 | |
| | | <u>\$65, 519. 66</u> |
| | | 276, 944. 46 |

From this should be deducted the following amounts:

| | | |
|---|-------------|----------------------|
| Payment of prizes on account of Willie E. Fitch prize fund.... | \$100. 00 | |
| Loss on sale of property at 903 M street..... | 2, 110. 57 | |
| Payments made on account of building site and expansion fund..... | 16, 042. 08 | |
| | | <u>\$18, 252. 65</u> |
| | | <u>258, 691. 81</u> |

Balance consisting of—

| | |
|--|-------------|
| 6 shares of A. T. & T. Company stock received in exchange for Penn. Bell Tel. Company stock, cost (market value, \$819). | \$600.00 |
| 130 shares Washington Sanitary Improvement Company stock, cost..... | 1,300.00 |
| \$5,000 worth Chicago, Rock Island and Pacific collateral trust 4 per cent bonds, cost (market value, \$3,875)..... | 4,118.75 |
| \$5,000 worth Chicago, Rock Island and Pacific collateral trust 4 per cent bonds, cost (market value, \$3,875)..... | 4,060.97 |
| \$24,000 worth Chicago, Rock Island and Pacific refunding 4 per cent bonds, cost (market value, \$21,240)..... | 20,959.17 |
| Mortgage note C. W. and C. M. Needham..... | 16,000.00 |
| Mortgage note T. R. Marshall..... | 5,000.00 |
| Mortgage note, Lewis Spectre..... | 200.00 |
| | <hr/> |
| | \$52,238.89 |
| Cash in banks..... | 238.07 |
| Due from general fund..... | 206,214.85 |
| | <hr/> |
| Total..... | 258,691.81 |

In addition to the above there is an asset of the Corcoran endowment fund consisting of sub lot 148, square 672, which is one of the original Burgdorf lots, upon which no cost value is extended by reason of the fact that more than the cost of the Burgdorf lots has already been realized from the lots already sold.

The borrowing from time to time from the Corcoran endowment and other trust funds to provide for the payment of current expenses has been with the knowledge and consent of the board of trustees and was continued in until May 7, 1908, at which time the finance committee submitted a statement of the assets of the Corcoran fund as available to meet running expenses and setting forth that at the close of the fiscal year 1908-9 there would be a deficit of \$16,540.67 "after all liquid cash and unencumbered real estate has been disposed of."

A copy of this statement is attached hereto and marked "Exhibit D."

Appended hereto and marked "Exhibit A" we attach a statement of the cash receipts and disbursements of the principal of the Corcoran and other trust and endowment funds from December 31, 1899, to date. Also a statement marked "Exhibit B," showing in detail transfers from the Corcoran endowment and other trust funds to the general expense account during the same period.

CONGRESSIONAL LAND GRANT.

In explanation of the item in the statement of liabilities "Proceeds of sale of lots granted by Congress \$70,872.93, less amount authorized by act of Congress of February 28, 1839, to be used for payment of the then existing debts, \$7,000; total, \$63,872.93," we would state that by the act of Congress approved July 14, 1832, it is enacted as follows:

That there shall be, and hereby are, granted to the Columbian College, in the District of Columbia, lots in the city of Washington, to the amount, in value, of twenty-five thousand dollars; which said lots shall be selected and valued by the commissioner of the public buildings, when requested by the trustees of the said college; and when the said lots shall be so selected and valued, the same shall be vested in the said corporation, in fee simple; to be by them held and disposed of in the manner following; that is to say, the said corporation, by proper and lawful act or acts, under their corporate seal, shall sell and dispose of the said lots, as soon as reasonably practicable, for the best price or prices they can obtain; and shall vest the proceeds of the same in some public stock, or in stock of some incorporated bank.

SEC. 2. *And be it further enacted*, That, when the lots aforesaid shall be selected and valued as aforesaid, the said commissioner shall make return of the numbers and description thereof to the clerk of the circuit court of the county of Washington, to be by him recorded among the records of land titles in the said county.

SEC. 3. *Ang be it further enacted*, That the proceeds of the sales aforesaid, so to be vested, shall not be otherwise used by the said trustees than as a capital, to be by them forever hereafter kept vested as aforesaid; and the dividends or interest therefrom accruing shall, by them, be used and applied in aid of the other revenues of the said college, to the establishment and endowment of such professorships therein as now are, or hereafter shall be, established by the said trustees; and to and for no other purpose whatever.

In pursuance of this act Joseph Elgar, commissioner, selected and conveyed to the Columbian College in the District of Columbia 180 city lots.

The act of Congress approved February 28, 1839, provided as follows:

That the corporation of the Columbian College be, and hereby is, authorized to sell so many of the city lots, granted to said corporation by the act to which this is supplemental, as shall be sufficient to raise the sum of seven thousand dollars, and to apply the proceeds of such sale to the payment of debts due from said corporation, anything in the act to which this is supplemental to the contrary notwithstanding.

The trustees of the Columbian College thereupon began the sale of the lots, and in 1841 had disposed of more than sufficient to raise the sum of \$7,000. Attached hereto and marked "Exhibit C" are extracts from the minutes of the trustees in April, 1841.

Subsequently, from time to time, lots were sold until there remained of the original grant but 10 lots, which are set out in the statement of assets of the congressional professorship fund.

By an examination of the records in the recorder of deeds' office from 1839 to date it has been ascertained that the total consideration for the lots sold has been the sum of \$70,872.93; so that the balance, after deducting the \$7,000 authorized to be used for the payment of debts by the act of 1839 should have been invested in accordance with the terms of the act of 1832. It appears, however, that the proceeds of these sales were mingled with the other funds of the institution and used from time to time for its current expenses.

By an act of the legislative assembly of the District of Columbia, approved July 25, 1871, entitled "An act for the relief of the Columbian College in the District of Columbia," it was enacted, *inter alia*, as follows:

That the Columbian College, in the District of Columbia, chartered by and organized and acting under the act of Congress approved February ninth, eighteen hundred and twenty-one, may, from the proceeds of any sale of its property, apply such sum as may be needful to pay its present indebtedness and place its libraries, buildings, and apparatus of instruction in good condition, and execute all deeds needful to quiet the title of property already sold.

By an act of Congress approved March 3, 1873, the title of the Columbian College was changed to Columbian University, and it is further provided in section 2 of said act as follows:

That the act for the relief of the Columbian College in the District of Columbia enacted by the legislative assembly of said District, and approved July twenty-fifth, eighteen hundred and seventy-one, be, and the same is hereby, approved and confirmed: *Provided*, That neither this act nor the said act of the legislative assembly of the said District shall be so construed as to authorize the said Columbian University to sell or use the proceeds of any sale of land granted by Congress to said institution for any purpose other than that expressed in the act of incorporation and the act granting any such land or real estate, or contrary to any will, devise, or grant of any land or real estate heretofore or hereafter made, by any person or persons to said institution.

At this time the institution was selling a number of lots which constituted a part of the then ground of the college on Capitol Hill which were the property of the college and were not part of the congressional grant. A number of the lots obtained from Congress were sold at this same time.

The following extract from the records of the trustees shows the interpretation put by them upon the act of the legislative assembly of the District of Columbia and the act of Congress confirming it:

[From trustees' records, volume 3, page 354, extract from report of President Welling, March 19, 1873.]

I have the satisfaction of stating that at the session of the National Congress just terminated a bill was passed for the modification of our college charter * * * approving and confirming the act passed by the legislative assembly of the District, approved July 25, 1871, for the relief of the Columbian College, with a proviso that neither that act nor the act of Congress modifying our charter shall be so construed as to authorize the Columbian University to sell or use the proceeds of any sale of land granted by Congress to the College for any purpose other than expressed in the act of incorporation, and the act granting any such land or real estate, or contrary to any will, devise or grant of land or real estate heretofore or hereafter made to the institution. * * *

The proviso is entirely prospective in its operation and effect, and hence the sale of land and real estate already effected by virtue of the act of the legislative assembly is now confirmed and approved by act of Congress. * * *

CORCORAN ENDOWMENT FUND.

The first steps toward the raising of this fund were taken by the board of trustees October 7, 1872, when they adopted a resolution "to increase the permanent endowment of the institution by raising the sum of \$250,000."

Mr. William W. Corcoran subsequently made a verbal offer to Doctor Welling, the then president of the university, to give his Trinidad farm of 99 acres as a part of the endowment. He afterwards wrote the following letter, stating the exact terms of the proposed gift:

WASHINGTON January 11, 1873.

WILLIAM STICKNEY, Esq.,

Secretary and Treasurer, Trustee of the Columbian College.

DEAR SIR: The report of the president of the college made to the trustees on the 18th December, last, and printed for the use of the members of the corporation but not published, seems to make the following explanation necessary in order to prevent any misunderstanding touching my proposition to donate Trinidad in furtherance of my design to place the college on a higher and more permanent footing.

About two months before the meeting of the 18th December I first announced to Doctor Welling my intention, in view of the previous proposition of the trustees to raise the sum of \$250,000 to aid in the permanent endowment of the college and its elevation to the dignity and usefulness of a university by donating Trinidad on certain conditions then expressed, to the effect that there was to be no relaxation of effort on the part of the friends of the college to obtain the \$250,000 which the board of trustees and overseers had previously resolved to raise for the permanent endowment of the institution, that the principal of the donation when realized should be funded and be kept forever intact, the interest alone being applied to the support of the college, and that Doctor Welling should pledge himself to remain in his present position in order that I might be assured that he would give his personal attention to the administration of the trust.

It was distinctly understood between Doctor Welling and myself that there was to be no relaxation (because of the promised donation) in the effort to increase the permanent endowment of the college at the earliest possible day, and it was in this faith that I consented, at his solicitation, that Doctor Welling should publish my purpose, and it was partly in this faith that he pledged himself to remain at the head of the college.

In view of these facts and considerations I have provided that if the sum of not less than \$100,000 of the \$250,000 proposed to be raised be obtained in cash by the college

authorities on or before the 1st day of January, 1875, for the purpose indicated, and Doctor Welling shall remain in his present position, my purpose shall be carried out, but if the said sum of not less than \$100,000 be not raised and received as aforesaid by the day named, or if Doctor Welling shall cease to be the president of the college from any cause except death, then, in either or both of said events, the donation will fail and the property will be otherwise disposed of.

These are the terms and conditions of my offer as fully understood between Doctor Welling and myself, and by him, I believe, reported to the trustees, and which I will take pleasure in carrying out.

Very truly, yours,

W. W. CORCORAN.

On April 25, 1873, the executive committee of the trustees of the university issued a "Plan of Columbian University," in which the following statement occurs:

Through the munificence of W. W. Corcoran, LL. D., president of the corporation, a valuable tract of land, adjacent to the city of Washington, estimated to be worth \$200,000, has been pledged to the permanent endowment of the university, provided the additional sum of \$100,000 be raised for the same purpose within the period of two years from the 1st day of January last. The principal of both these sums is to be funded and to remain forever intact.

On January 23, 1875, Mr. Corcoran executed a deed for the Trinidad farm. This was held in escrow and was to be delivered when \$50,000 cash was obtained from subscriptions. This amount was afterwards paid and the deed was delivered and recorded July 7, 1875. In this deed the following provisions appear:

Whereas it is the desire of the said William W. Corcoran, to aid in the establishment, at the seat of government of the United States, of an institution, designed for the acquisition of knowledge in all the higher branches of learning, where the youth of the country may enjoy the most enlarged advantages of a liberal education through coming time, and with that desire and intent he is moved to make this conveyance to the said "Columbian University" in accordance with the acts of Congress heretofore referred to, and in part recited, to be held and disposed of, by the trustees, for the benefit of the sd. "Columbian University," in the manner hereinafter provided, and in accordance with such lawful rules and regulations as now exist or that may hereafter be established by them and their successors.

To have and to hold the said parcels of land, with the rights, et cetera, as aforesaid, unto the said party of the second part, and its assigns, for the use and benefit and purposes of the said "Columbian University," forever; but this conveyance is made in the nature of a trust, and upon this condition, to wit: That the said party of the second part, or the proper authority of the said college, or of the present Columbian University, may, in their discretion, sell and convey said lands, or any portion thereof, in fee simple, in such a manner, at such times, and upon such terms and conditions as they, or their successors, may elect, provided that the proceeds, or purchase money, thereof, together with the sum of one hundred thousand dollars, subscribed and to be obtained from other sources, in addition to the proceeds of the sale of Trinidad, shall constitute a principal sum, to be known as the "Corcoran endowment fund," and to be forever held inalienable, and not to be diminished by use for the support of said institution, but that the whole amount of said principal sum shall be invested, in the discretion of the trustees of said institution and according to their best judgment, and the interest thereon, or the income therefrom derived, only, shall be used for the current expenses and support of the said institution; provided always, that in case of the sale of said property, or of any portion of the same, the purchaser, or the purchasers, shall not be held responsible for the disposal of the purchase money; and this deed is to be effectual and binding in law, when accepted by the trustees of the "Columbian University," and signed by the president thereof, and attested by the secretary under the seal of the institution.

Subsequently the Trinidad property was sold for \$85,000 and Mr. Corcoran, on June 11, 1886, gave a further contribution of \$25,000 cash to the fund. A copy of his letter is as follows:

WASHINGTON, June 11, 1886.

MY DEAR DOCTOR WELLING: As I have learned that an addition to the working endowment of the Columbian University would greatly promote its efficiency, and as I continue to take a deep interest in the prosperity of the institution, I take pleasure

in communicating to you, and through you to the corporation, that I will cheerfully contribute for this purpose the sum of \$25,000, with the understanding that, as an addition to the present endowment the principal shall be kept perpetually intact, and that only the annual interest thereof shall be used for the working expenses of the university.

Yours, most truly,

W. W. CORCORAN.

The balance of the fund was obtained from other subscribers. It has not been possible up to this date to trace out all the receipts and expenditures of the fund from its inception. This will be done later, but for the purpose of this report the amount of the fund as stated in the treasurer's report for December 31, 1899, is taken as a starting point, and all transactions since that date are fully set out in the schedules herein.

The first impairment of the fund appears to have been in 1885. At the meeting of the corporation on March 27, 1885, Doctor Welling, "on behalf of the building committee," stated that "while all the corporation were aware that the principal arising from the sale of Trinidad could not be used for current expenses, it was deemed advisable to borrow from this source temporarily the sum of \$10,000, rather than mortgage the valuable property of the university." It was thereupon—

Ordered, That the sum of \$10,000 be temporarily borrowed from the cash payment on Trinidad, to meet the expenses incurred in the equipment of the Corcoran Scientific School; the consent of Mr. W. W. Corcoran to be obtained.

It is stated in the treasurer's annual report for that year that Mr. Corcoran's consent was obtained to this borrowing.

Afterwards the university appears to have borrowed from the Corcoran endowment fund \$38,434.13 and given its notes for the same.

In the year 1897 it was discovered that the then treasurer, Robert H. Martin, had embezzled the sum of \$25,850.81 of the funds of the institution (of which \$4,840 was subsequently recovered). Part of this consisted of assets of the Corcoran endowment fund.

In volume 5 of the record of trustees, page 237, the following appears in the minutes of a meeting held January 29, 1887, at which President Whitman and Messrs. Greene, Mason, McKnew, Needham, Wilson, and Woodward were present:

Mr. James G. Hill, architect, at the invitation of the treasurer, Mr. Woodward, presented plans for a new seven-story office building on the site of the old law building, together with estimates of cost and probable income from rentals.

President Whitman called attention to the fact that at the late meeting of the corporation certain plans and instructions were left to be carried out by the board: First, with reference to the adjustment of the Corcoran endowment and other trust funds made necessary by the defalcations of the late treasurer, Mr. Robert H. Martin. Mr. Needham offered the following resolution, which was adopted:

"Whereas some years heretofore a portion of the Corcoran endowment fund was invested in three notes aggregating \$38,434.13, executed or assumed by the Columbian University and secured by trust deeds upon its property known as the 'law building' on Fifth street, and the Preparatory School building; and

"Whereas it is for the best interests of the university that the floating indebtedness of the university be paid; therefore,

Resolved, That the said three notes of the Columbian University aggregating \$38,434.13, and heretofore carried as a part of the Corcoran endowment fund be canceled, and the trust deeds upon the property known as the 'law building' on Fifth street, and the Preparatory School building be released of record; that said property known as the 'law building,' being lot 14 and the south half of lot 13 in square 489 in the city of Washington, District of Columbia, be, and the same is hereby, made a part and placed to the credit of the Corcoran endowment fund, free and clear of all encumbrance, at a valuation of \$50,000, and that hereafter in all statements of the assets of

said university said real estate last above described shall be listed as a part of the Corcoran endowment fund at said valuation.

"*Resolved*, That the twelve unimproved lots mentioned in schedule D of the treasurer's report for the year ending May 31, 1897, be, and the same are hereby, made a part and placed to the credit of the Corcoran endowment fund free and clear of all encumbrances at a valuation of \$40,000, and that hereafter in all statements of the assets of said university said twelve unimproved lots shall be listed as a part of the Corcoran endowment fund at said valuation.

"*Resolved*, That \$5,000 of the principal note of James J. Lampton for \$9,000, dated February 9, 1895, due in five years thereafter, with the interest to accrue thereon, be transferred to the Mary M. Carter fund, appropriated by Robert H. Martin, and that hereafter only \$4,000 of said principal note shall belong to and be listed in the Corcoran endowment fund.

"*Resolved*, That the executive committee are hereby directed to use \$27,900 or as much thereof as may be necessary of the assets now listed under the Corcoran endowment fund and the miscellaneous investment fund, as the same matures, or can be disposed of at not less than their face value with accrued interest, to pay off the liabilities of the university set forth in Schedule C, of the treasurer's report for the fiscal year ending May 31, 1897."

From this it would appear that the trustees sold the old law-building site on Fifth street to the Corcoran fund for \$50,000 and attempted to transfer to the Corcoran fund the balance of the lots granted by Congress at a valuation of \$40,000. The Fifth street site had been offered to the Government for a post-office a short time previously for \$35,000.

The lots granted by Congress being the subject of a special trust and not applicable to the payment of debts, the effect of this arrangement was to leave the Corcoran fund impaired to the extent of \$40,000.

Afterwards the assets of the Corcoran fund were used to erect the Columbian Building on the Fifth street site. This was sold in 1905 for \$162,500 and the proceeds used to pay notes given for the purchase of Van Ness Park. Van Ness Park was then sold in 1907 to the Government for \$200,000 and part of the proceeds invested and the balance transferred to the general fund. Most of the investments have since been sold and the proceeds merged into the general fund and used for current expenses.

BUILDING, SITE, AND ENLARGEMENT FUND.

In February, 1907, at the time of the sale of Van Ness Park, the trustees of the university determined to raise \$400,000 for a building-site fund and received various large subscriptions and offers of donations contingent upon their selecting one of certain sites for college purposes. Prominent among the proposed sites was that known as the "Dean site."

For the purpose of raising the \$400,000 two committees were selected, and in their solicitation apparently made different representations as to the purpose of the fund, one representing that it was for a "building site," and one that it was for a "building site and enlargement of the educational work."

These two committees succeeded in raising over \$100,000 in subscriptions, of which sum \$35,568.18 has been paid in in cash, classified as follows:

| | |
|---------------|--------------|
| Trustees..... | \$2, 085. 00 |
| Faculty..... | 3, 635. 70 |
| Alumni..... | 1, 678. 00 |
| Students..... | 964. 98 |
| Citizens..... | 27, 204. 50 |
| Total | 35, 568. 18 |

The subscription cards in the possession of the treasurer, with one or two exceptions, read as follows:

THE GEORGE WASHINGTON UNIVERSITY [date].

To secure the sum of four hundred thousand dollars to be applied by the trustees toward the purchase of grounds and buildings and the enlargement of the educational work, and in consideration of the subscription of others, I will pay to the George Washington University ——— dollars in five equal installments.

Since the signing of these cards some have refused to pay anything and some, having paid part, have refused to continue paying, for the reason that the funds were being used for general expenses.

The minutes of the trustees on October 13, 1909, show:

The recommendation of the president with regard to the building site and expansion fund, that he would accompany members of the board of trustees in calls upon the subscribers to that fund to arrange for the transference of such funds to the general expense of the university, was adopted.

On March 16, 1910, at a joint meeting of the executive and finance committees (see Exhibit E), it was decided to send a letter to each subscriber (see Exhibit F) and follow the letter with a personal interview, to obtain consent to use half the fund for building site and half for current expenses.

The \$35,568.18 raised from subscriptions, together with the \$200,000 received February 16, 1907, from the sale of Van Ness Park, was used as follows:

General statement, building, site, and enlargement fund.

RECEIPTS.

| | |
|--------------------------------|-------------------|
| Subscriptions..... | \$35,568.18 |
| Sale of Van Ness property..... | 200,000.00 |
| Interest..... | 435.59 |
| Total..... | <u>236,003.77</u> |

DISBURSEMENTS.

| | |
|--------------------------------|-------------------|
| M. Carrol, salary..... | 999.96 |
| C. B. Newcomer, salary..... | 500.00 |
| G. C. Peck, salary..... | 235.49 |
| Clerks, salary..... | 249.00 |
| R. D. Harlan: | |
| Salary to March 1, 1910..... | \$7,291.55 |
| Commissions..... | 920.00 |
| Expenses..... | 3,389.00 |
| | <u>11,600.55</u> |
| Postage..... | 532.60 |
| Printing..... | 990.73 |
| Stationery..... | 9.60 |
| Miscellaneous items..... | 924.15 |
| 1710 N street..... | 8,500.00 |
| Loans to general expenses..... | 137,737.70 |
| Investments..... | 73,546.78 |
| Balance in bank..... | 177.21 |
| Total..... | <u>236,003.77</u> |

We have examined the vouchers for payments out of these funds and find them properly itemized, with certain exceptions, as to which explanations have been made.

Dr. Richard D. Harlan was appointed on April 1, 1907, as the special representative of the university. In the printed literature

his name appears as special representative of the so-called "George Washington University Movement." It is stated that his duties are to assist the president in enlarging and developing the institution.

In addition to his other work in connection with the development of the university, Doctor Harlan has secured \$2,770 for the building, site, and enlargement fund, and the following subscriptions to the sustentation fund for the college of the political sciences, payable in annual installments during a period ending with 1912:

| | |
|---|-----------|
| Unconditional subscriptions..... | \$37, 230 |
| Subscriptions conditioned on raising \$125,000..... | 9, 000 |

46, 230

Of this sum \$17,230 has been received in cash, the balance of the unconditional subscriptions being payable during the years 1910, 1911, and 1912.

Doctor Harlan's total compensation and expenses have been paid out of the building, site, and enlargement fund, while the money raised by him, with the exception of the \$2,770 above mentioned, has gone to the college of the political sciences. Since March 1, 1910, his salary has been paid out of the general-expense account, the bank balance of the building, site, and enlargement fund having been exhausted. The details of Doctor Harlan's appointment are shown in the letters, copies of which are hereto annexed marked Exhibits "G," "H," and "M1."

The miscellaneous items are for the most part of small amounts, but \$689.85 was for expenses for dinner and luncheons at hotels, incident to the launching of the building-site movement.

The item "1710 N street \$8,500" is included with \$7,500 paid from trust funds and is dealt with elsewhere in this report.

Loans to general expense and investments are included in the general statement of the Corcoran and other trust funds.

C. W. NEEDHAM HOUSE, 1710 N STREET.

This house was purchased under the following circumstances: Doctor Needham signed an agreement with Westcott & Story on November 10, 1906, to purchase the house for \$5,500 cash, subject to an existing encumbrance of \$5,500. Five hundred dollars cash on account of the purchase money was paid out of the trust funds at the time of signing the agreement.

President Needham reported the purchase to the board of trustees on November 14, 1906, and his action was approved. (See Exhibit M2.) The sale was perfected November 28, 1906, and the balance of \$5,000 paid and title taken in the name of the treasurer as trustee for the university. Repairs and alterations to the house were made costing \$9,266.46. In addition thereto there was paid for interest and taxes \$250.87, furniture \$487, and cash paid to Doctor Needham \$495.67. A statement of these expenditures is hereto attached marked "Exhibit N."

The explanation of this cash payment to Doctor Needham is that he had paid sundry small bills for repairs "amounting to about that sum," and the amount was made \$495.67 to make the investment stand the university exactly \$16,000. This payment was made June 14, 1907. The trustees on June 5 had authorized the investment by the executive committee of \$16,000 in the N street house. (See Exhibit M2.)

On December 17, 1907, the president offered, in view of the maturity of the mortgage of \$5,500, that he would take title to the house, pay off the mortgage of \$5,500 out of his own funds, and give the university his own note and mortgage for \$16,000, payable in three years at 4 per cent.

This offer was accepted by the executive committee. (See extracts from records of executive committee hereto attached, marked "Exhibit O.")

This arrangement was carried out; Charles W. Holmes, the treasurer, who held title as trustee, conveyed the property to Charles W. Needham, and Doctor Needham paid off the mortgage of \$5,500 and gave a note properly secured by a trust deed on the property for the

\$16,000. By this action the university secured a first lien on the house for \$16,000 and Doctor Needham received the equity for his \$5,500. Prior to this the university held the equity subject to a first mortgage of \$5,500.

ADMIRAL POWELL HOUSE, 1707 I STREET.

This house was devised to the university by the late Admiral Levin M. Powell by his will, to be held in perpetual trust by the university, and the net proceeds from its annual rental to be applied to the creation of free scholarships for the benefit of students proposing to enter the Naval Academy at Annapolis, or to embark in the service of the merchant marine.

The house is rented at \$150 per month and the income is carried into the general fund. (See Exhibit E, resolution of executive committee.)

In the statement of the liabilities of the general fund is included "due to banks \$61,500" standing unsecured, but the record of the trustees shows they purposed to hold as collateral for loans not to exceed \$70,000, the equity in the lots at the corner of Fifteenth and H streets, the lots at 1325 to 1335 H street, over and above the mortgage of \$450,000, held by the Fidelity Trust Company of Philadelphia, and also the lots remaining of the congressional grant and the lot remaining of the Burgdorf lots which belonged to the Corcoran endowment fund. A copy of such a resolution was delivered to each bank from whom they borrowed, and a copy of same is attached hereto and marked "Exhibit P."

The early history of and the transactions relating to the various endowment funds prior to December 31, 1899, and the detailed statement of the receipts and expenditures of the university in its various departments, and all other matters not covered by this report, will be incorporated in our final report.

Respectfully,

NELSON B. KEYSOR,
SHERRILL SMITH,
Special Bank Accountants.

EXHIBIT A.

Cash receipts and disbursements, principal of Corcoran and other trust and endowment funds.

RECEIPTS.

| | | | |
|-------|-----------|--|-------------|
| Dec. | 31, 1899. | Cash balance Corcoran fund..... | \$97. 74 |
| | | Cash balance, Fitch fund..... | 250. 67 |
| Feb. | 1, 1900. | Borrowed from Mutual Benefit Life Insurance Company. | 40, 000. 00 |
| May | 7, 1900. | McLachlen & White note paid..... | 3, 000. 00 |
| Sept. | 26, 1900. | Account Fitch fund..... | 72. 00 |
| Sept. | 26, 1901. | Do..... | 81. 94 |
| | 1901. | Received principal Thos. F. Walsh prize fund..... | 300. 00 |
| Mar. | 28, 1902. | Net proceeds of sale of 1719 S street..... | 12, 570. 18 |
| Mar. | 6, 1902. | J. H. Lane note paid..... | 2, 400. 00 |
| Apr. | 11, 1902. | J. B. Wimer note paid..... | 2, 000. 00 |
| | | Do..... | 5, 000. 00 |
| | | Do..... | 3, 000. 00 |

| | | | |
|------|-----------|--|----------------|
| Apr. | 22, 1902. | Account Fitch fund..... | \$36. 00 |
| | | Received from American Security and Trust Company, legacy M. Marian Cutter, to establish prize for excel- lence in English (E. K. Cutter prize)..... | 1, 000. 00 |
| Nov. | 2, 1902. | Proceeds E. S. Parker notes..... | 8, 000. 00 |
| Nov. | 29, 1902. | Proceeds Burgdorf lot sold..... | 716. 41 |
| Aug. | 31, 1903. | Do..... | 7, 068. 01 |
| Nov. | 4, 1903. | Borrowed from Riggs National Bank on Van Ness Park.. | 100, 000. 00 |
| | | Borrowed from Washington Loan and Trust Company on Columbian Building (to pay for Van Ness Park)..... | 62, 000. 00 |
| Jan. | 4, 1904. | Proceeds \$13,000 Chesapeake and Ohio Canal bonds sold.. | 3, 510. 00 |
| Mar. | 4, 1904. | Proceeds sale Burgdorf lots..... | 4, 471. 94 |
| May | 4, 1904. | Proceeds J. W. McLachlen note paid..... | 1, 200. 00 |
| Jan. | 30, 1905. | Proceeds sale Burgdorf lots..... | 1, 847. 50 |
| June | 30, 1905. | Received account sale 903 M street..... | 200. 00 |
| July | 22, 1905. | Received balance sale 903 M street..... | 5, 600. 00 |
| Oct. | 16, 1905. | Received in settlement of Eleanor J. Cooper bequest for medical endowment..... | 8, 750. 00 |
| Dec. | 7, 1905. | Received net proceeds sale of Columbian Building..... | \$159, 200. 01 |
| | | Less mortgage note assumed by purchaser .. | 50, 000. 00 |
| | | | 109, 200. 01 |
| Feb. | 9, 1906. | Received liquidating dividend, Quinsigamond National Bank..... | 500. 00 |
| May | 1, 1906. | Do..... | 200. 00 |
| June | 28, 1906. | Received from National Park Seminary for endowment of hospital bed..... | 500. 00 |
| Nov. | 7, 1906. | Received Sisters of Visitation note paid..... | 1, 000. 00 |
| Feb. | 20, 1907. | Received sale of American Institute of Architects loan.. | 8, 000. 00 |
| May | 17, 1907. | Received proceeds sale of Van Ness Park..... | 200, 000. 00 |
| June | 15, 1907. | Received J. W. Hogg note sold..... | 1, 875. 00 |
| June | 20, 1907. | Received E. M. Power note sold..... | 10, 000. 00 |
| Dec. | 30, 1907. | Received sale \$16,000 participation Memphis Union Sta- tion loan..... | 15, 921. 18 |
| Mar. | 27, 1908. | Received sale \$9,000 participation Memphis Union Sta- tion loan..... | 9, 000. 00 |
| Apr. | 29, 1908. | Received sale \$15,000 participation Memphis Union Sta- tion loan..... | 15, 000. 00 |
| May | 11, 1908. | Received sale Jesse C. Love note..... | 1, 000. 00 |
| May | 28, 1908. | Received sale \$10,000 participation, Memphis Union Sta- tion loan..... | 10, 212. 55 |
| Aug. | 31, 1908. | Received sale Goldman note..... | 1, 000. 00 |
| Dec. | 3, 1908. | Received sale \$6,000 Chicago, Rock Island and Pacific refunding 4 per cent bonds..... | 5, 392. 50 |
| Dec. | 21, 1908. | Received H. S. Crocker notes paid..... | 2, 000. 00 |
| Dec. | 23, 1908. | Received sale \$15,000 Chicago, Rock Island and Pacific collateral 4 per cent bonds..... | 11, 250. 00 |
| Apr. | 1, 1909. | Received bequest of Dr. John Odronaux and interest.... | 4, 792. 97 |
| Mar. | 12, 1910. | Received sale of \$5,000 Chicago, Rock Island and Pacific 5 per cent bonds..... | 5, 125. 00 |
| | | Contribution to building, site, and enlargement fund.... | 35, 568. 18 |
| | | Interest on same..... | 435. 59 |
| | | | 721, 145. 37 |

EXPENDITURES.

| | | | |
|------|-----------|--|---------------|
| Feb. | 1, 1900. | Cash paid National Metropolitan Bank account notes.... | \$40, 000. 00 |
| May | 7, 1900. | Cash paid National Metropolitan Bank..... | 3, 000. 00 |
| | 1901. | Invested in 30 shares of Washington Sanitary Improve- ment Company..... | 300. 00 |
| Mar. | 5, 1902. | National Metropolitan Bank..... | 3, 661. 50 |
| | | 2 prizes Fitch fund..... | 100. 00 |
| Apr. | 12, 1902. | Invested in J. M. Crocker note..... | 1, 000. 00 |
| | | Do..... | 1, 000. 00 |
| | | Invested in E. S. Parker note..... | 5, 000. 00 |
| | | Do..... | 3, 000. 00 |

| | | | |
|-------|-----------|---|--------------------|
| Apr. | 24, 1902. | Invested in 100 shares Washington Sanitary Improvement Company..... | \$1, 000. 00 |
| Jan. | 10, 1903. | Invested in 8 shares American Institute of Architects loan..... | 8, 000. 00 |
| Mar. | 5, 1903. | Paid account Van Ness Park..... | 1, 000. 00 |
| Aug. | 1, 1903. | Paid note of Mutual Benefit Life Insurance Company... | 40, 000. 00 |
| Dec., | 1903. | Paid balance purchase money Van Ness Park..... | 161, 043. 21 |
| May | 12, 1904. | Invested in note of Sisters of Visitation..... | 1, 000. 00 |
| Feb. | 14, 1905. | Invested in 4 shares Pennsylvania Telephone Company stock..... | 200. 00 |
| May | 6, 1905. | Paid account of mortgage notes on Columbian building.. | 12, 000. 00 |
| Nov. | 2, 1905. | Paid Washington Loan and Trust Company for 5,000 Rock Island Railway 5 per cent bonds..... | 4, 618. 75 |
| | | Paid Washington Loan and Trust Company for 5,000 Rock Island Railway 4 per cent bonds..... | 4, 118. 75 |
| Dec. | 7, 1905. | Paid Riggs National Bank mortgage notes on Van Ness Park..... | 100, 000. 00 |
| Nov. | 7, 1906. | Invested in Jesse C. Love note..... | 1, 000. 00 |
| Nov. | 10, 1906. | Paid Westcott & Storey, on account of purchase 1710 N street..... | 500. 00 |
| Feb. | 20, 1907. | To general fund for balance purchase money 1710 N street..... | \$5, 000. 00 |
| | | Cash paid C. S. Denham on account alterations 1710 N street..... | 2, 000. 00 |
| Feb. | 20, 1907. | Invested in Goldman note..... | 7, 000. 00 |
| June | 14, 1907. | Paid C. W. Needham, account 1710 N street..... | 1, 000. 00 |
| June | 21, 1907. | Paid contractor, etc., account 1710 N street..... | 495. 67 |
| July | 6, 1907. | Invested in \$50,000 participation in loan to Memphis Union Station..... | 7, 608. 33 |
| July | 8, 1907. | Invested in \$30,000 Chicago, Rock Island and Pacific Railway refunding 4 per cent bonds..... | 49, 561. 27 |
| Aug. | 16, 1907. | Paid Zellers, steam-heating apparatus, 1710 N street..... | 26, 351. 67 |
| Oct. | 16, 1907. | Invested in \$15,000 Chicago, Rock Island and Pacific collateral trust 4 per cent bonds..... | 396. 00 |
| Sept. | 2, 1909. | Invested in \$5,000 Chicago, Rock Island and Pacific collateral 4 per cent bonds..... | 9, 770. 11 |
| May | 25, 1910. | Invested in mortgage note of Thomas R. Marshall..... | 4, 060. 97 |
| May | 25, 1910. | Invested in mortgage note of Lewis Spectre..... | 5, 000. 00 |
| | | | 200. 00 |
| | | | <hr/> 502, 986. 23 |

EXPENDITURES BUILDING, SITE, AND ENLARGEMENT FUND.

Salaries:

| | |
|---|--------------------|
| Mitchell Carroll..... | 999. 96 |
| C. B. Newcomer..... | 500. 00 |
| G. C. Peck..... | 235. 49 |
| Miscellaneous clerks..... | 249. 00 |
| R. D. Harlan..... | 7, 291. 55 |
| Extra salary or commission, R. D. Harlan..... | 920. 00 |
| Expenses, R. D. Harlan..... | 3, 389. 00 |
| Postage..... | 532. 60 |
| Printing..... | 990. 73 |
| Stationery..... | 9. 60 |
| Miscellaneous..... | 924. 15 |
| | <hr/> 519, 028. 31 |
| Total receipts..... | 721, 145. 37 |
| Total payments..... | 519, 028. 31 |
| Balance..... | <hr/> 202, 117. 06 |

EXHIBIT B.

Transfers from Corcoran endowment and other trust funds to general expense account.

| | | | |
|-------|-----------|--|---------------|
| Feb. | 28, 1902. | Proceeds sale of 1719 S street, \$12,570.18 net sale (\$9,118.83 to Corcoran endowment fund)..... | \$3, 451. 35 |
| Mar. | 5, 1902. | Loan to general expense, "balance of above" and \$97.74 cash balance..... | 5, 555. 07 |
| Mar. | 7, 1902. | Loan to general expense, "proceeds of Lane note"..... | 2, 400. 00 |
| Aug. | 31, 1902. | Transferred to general expense, W. E. Fitch prize cash balance..... | 340. 61 |
| Nov. | 29, 1902. | Transferred to general expense, sale of one Burgdorf lot No. 101..... | 716. 41 |
| Dec. | 27, 1902. | Loan to general expense, Columbian building "net proceeds"..... | 9, 200. 01 |
| | | Loan to general expense, balance Cooper endowment ... | 12. 50 |
| Jan. | 4, 1904. | Transfer to general expense, sale of Chesapeake and Ohio bonds..... | 3, 510. 00 |
| Mar. | 4, 1904. | Transfer to general expense, Burgdorf lots Nos. 116-120... | 4, 471. 94 |
| Jan. | 30, 1905. | Transfer to general expense, Burgdorf sale Nos. 123-124... | 1, 847. 50 |
| June | 30, 1905. | Transfer to general expense, account 903 M street..... | 200. 00 |
| July | 22, 1905. | Transfer to general expense, balance 903 M street..... | 5, 600. 00 |
| July | 9, 1907. | Amount returned by National City Bank of New York, being difference between amount sent (\$50,000) and actual cost of Memphis Union Station certificate (credited to Corcoran endowment income account)..... | 438. 73 |
| Dec. | 30, 1907. | Loan to general expense, proceeds sale of \$16,000 Memphis Union Station..... | 15, 921. 18 |
| Mar. | 27, 1908. | Loan to general expense, proceeds sale of \$9,000 Memphis Union Station..... | 9, 000. 00 |
| Apr. | 29, 1908. | Loan to general expense, proceeds sale of \$15,000 Memphis Union Station..... | 15, 000. 00 |
| May | 28, 1908. | Loan to general expense, proceeds sale of \$10,000 Memphis Union Station..... | 10, 212. 55 |
| Aug. | 31, 1908. | Loan to general expense, proceeds Love & Goldman notes. | 2, 000. 00 |
| Dec. | 3, 1908. | Loan to general expense, \$6,000 Rock Island Railway 4 per cent bonds..... | 5, 392. 50 |
| Dec. | 23, 1908. | Loan to general expense, \$15,000 Rock Island Railway collateral trust 4 per cent bonds..... | 11, 250. 00 |
| Mar. | 23, 1909. | Loan to general expense, proceeds Crocker notes..... | 2, 000. 00 |
| Sept. | 3, 1909. | Transfer to general expense, Ordronaux endowment..... | 732. 00 |
| Aug. | 31, 1903. | Transfer to general expense, sale of Burgdorf lots Nos. 95 to 100..... | 7, 068. 01 |
| May | 16, 1907. | Profits on Van Ness Park to general expense..... | 30, 000. 00 |
| Aug. | 16, 1907. | Interest on building site and enlargement to general expense..... | \$114. 73 |
| Mar. | 16, 1908. | Do..... | 145. 98 |
| Aug. | 31, 1908. | Do..... | 22. 45 |
| | | | 283. 16 |
| Apr. | 1, 1907. | Loans to general expense..... | 1, 000. 00 |
| June | 14, 1907. | Do..... | \$20, 000. 00 |
| | | Do..... | 20, 000. 00 |
| | | Do..... | 7, 000. 00 |
| | | Do..... | 21, 000. 00 |
| | | | 68, 000. 00 |
| July | 1, 1907. | Do..... | 10, 000. 00 |
| Aug. | 1, 1907. | Do..... | 10, 000. 00 |
| Aug. | 16, 1907. | Do..... | 454. 54 |
| Aug. | 31, 1907. | Do..... | 2, 000. 00 |
| Sept. | 3, 1907. | Do..... | 1, 000. 00 |
| | | Do..... | 2, 000. 00 |
| | | Do..... | 2, 000. 00 |
| Dec. | 2, 1907. | Do..... | 6, 000. 00 |
| Aug. | 3, 1908. | Do..... | 4, 000. 00 |
| Dec. | 1, 1908. | Do..... | 2, 000. 00 |
| Dec. | 2, 1908. | Do..... | 2, 000. 00 |
| Dec. | 2, 1909. | Do..... | 2, 800. 00 |
| Jan. | 4, 1910. | Do..... | 2, 000. 00 |

115, 254. 54

Less loans returned:

| | | |
|--------------|------------|--------------|
| Dec. 2..... | \$2,000.00 | |
| Dec. 27..... | 2,000.00 | |
| May 18..... | 1,000.00 | |
| Dec. 4..... | 2,000.00 | |
| Dec. 29..... | 800.00 | |
| | <hr/> | \$7,800.00 |
| | | <hr/> |
| | | \$107,454.54 |
| | | <hr/> |
| | | 254,058.06 |

Less:

| | | | |
|---------------|--|-----------|------------|
| Dec. —, 1903. | Amount paid for Van Ness Park in excess of loans amounting to \$162,000 | 43.21 | |
| May 6, 1905. | Paid from general expense on account of mortgage note on Columbian building..... | 12,000.00 | |
| Feb. 1, 1903. | Paid note of Mutual Benefit Life Insurance Company..... | 40,000.00 | |
| | | <hr/> | 52,043.21 |
| | | | <hr/> |
| | | | 202,014.85 |

EXHIBIT C.

[Extract from trustees' records, vol. 2, p. 55.]

APRIL 23, 1841.

The following promissory notes in the hands of the treasurer: * * * [list of notes aggregating] \$630.71.

The following notes, which have been taken for the sale of city lots, are in treasurer's possession, and when paid the proceeds will be invested for the faculty fund: * * * [list of notes aggregating] \$4,187.39.

[Extract from trustees' records, vol. 2, p. 56.]

APRIL 23, 1841.

List of city lots remaining unsold and their estimated value: * * * [list of lots] * * * Total value, \$5,858.

From the foregoing it will appear that, after the payment of the debts, the property of the college remaining from the city lots will be about \$10,000, which, under the act of Congress by which the grant was made, must be invested as a permanent fund to aid in support of the faculty.

EXHIBIT D.

[Record of the meeting of the board of trustees, May 7, 1908. See record book, vol. 6, p. 375.]

Report of the finance committee was presented and is as follows:

MAY 2, 1908.

To the BOARD OF TRUSTEES OF

THE GEORGE WASHINGTON UNIVERSITY.

GENTLEMEN: Your finance committee begs to submit the following report in connection with the budget for the year 1908-9, which will be presented by the president of the university.

At the expiration of the present financial year, viz, August 31, 1908, we find the university's resources available for meeting running expenses, will be as follows:

| | | |
|--|-------------|-------------|
| Mortgages, notes | \$20,000.00 | |
| Railway bonds (market value)..... | 14,070.00 | |
| | <hr/> | |
| Total balance Corcoran fund..... | | \$34,070.00 |
| Unincumbered real estate of an estimated value of..... | | 48,571.00 |
| | | <hr/> |
| Total..... | | 82,641.00 |
| Less: | | |
| Unpaid bills August 31, 1908..... | \$16,384.00 | |
| Sum borrowed from building, site, and endowment fund.. | 13,501.32 | |
| | <hr/> | 29,885.32 |
| | | <hr/> |
| Net available..... | | 52,755.68 |

The budget presented by the president and treasurer for the year 1908-9
shows a deficiency of..... \$69, 296. 35

Leaving to be found a sum of..... 16, 540. 67

after all liquid cash and unincumbered real estate has been disposed of.

The president's report gives tables showing past deficiencies and their causes and the basis of the calculations for the coming year.

The president estimates an equity of \$550,000 in the university's mortgaged properties. It is doubtful, under the present circumstances, whether any money can be raised on these equities without selling the entire property.

The condition of the university's finances, as shown above, is most grave and demands the earnest consideration of each and all of its trustees.

Respectfully submitted.

HENNEN JENNINGS.
H. C. PERKINS.
JOHN JOY EDSON.

EXHIBIT E.

[Joint meeting of the executive committee and the finance committee, board of trustees.

WEDNESDAY, March 6, 1910.

Pursuant to the request of the president of the university, the executive and finance committees of the board of trustees met in the office of the president Wednesday, March 16, 1910, at 2.30 in the afternoon.

There were present the president of the university, Mr. Macfarland, chairman, presiding; Mr. Larner, Mr. Snow, Mr. Perkins, and Mr. Lisner, the treasurer of the university, and the secretary of the university.

The president stated the purpose of the meeting to be the preparation of a letter by the executive committee which should embody the conclusions reached by the board of trustees at the meeting March 14, 1910, regarding the subscriptions to the building, site, and expansion fund.

Considerable discussion arose as to the wisdom of sending such letter to the subscribers instead of personal interview. It was finally thought advisable to send a letter and follow it by a personal interview.

On motion of Mr. Snow the following resolution was adopted:

"*Resolved*, That the secretary be directed to send a letter in the following form to all subscribers to the building, site, and expansion fund who are not connected with the university as trustees, members of faculty, or students, and who have not yet paid their subscriptions or who have not made subscriptions on other terms, which ought justly to be regarded as relieving these subscriptions, the secretary being authorized to vary this form of letter to suit the circumstances."

The following form of letter as proposed by Mr. Snow was thereupon adopted, and it was decided that the sending out of the letters be done as quickly as possible, and extra office help was authorized for this purpose. (Copy letter. See Exhibit F.)

It was suggested by Mr. Lisner that as far as possible members of the board by twos should endeavor to divide up the list of large subscribers and see them as quickly as possible, in order that if their consent be gained to the application of their subscriptions to current expenses that the sum so procured might be used to meet the requirements of the treasurer's office on April 1.

The following resolution regarding the Powell scholarship fund proposed by Mr. Snow was then adopted:

Resolved, That President Needham, Mr. Mattingly, and Mr. Snow be appointed a committee to report the facts concerning the Powell scholarship fund, and, if possible, also a plan for making some permanent arrangement concerning the use of this fund for the purposes specified by the donor, said committee to report to the executive committee, or in case the board of trustees shall meet before the executive committee, to the board of trustees.

No further business appearing, the committees adjourned at 4 o'clock.

H. C. DAVIS, *Secretary of the University.*

The minutes of the joint meeting of the executive committee and the finance committee March 16, 1910, were read and on motion approved at a meeting of the executive committee May 10, 1910.

H. C. DAVIS, *Secretary.*

EXHIBIT F.

THE GEORGE WASHINGTON UNIVERSITY,
OFFICE OF THE SECRETARY,
Washington, D. C., March 17, 1910.

DEAR SIR: By direction of the executive committee of the board of trustees I beg to call your attention to your subscription for university purposes and to the interpretation thereof by the board of trustees. The subscription reads as follows:

"THE GEORGE WASHINGTON UNIVERSITY,
(Give date).

"To secure the sum of \$400,000 to be applied by the trustees toward the purchase of grounds and buildings, and the enlargement of the educational work, and in consideration of the subscriptions of others, I will pay to the George Washington University ——— dollars in five equal installments, the first installment to be paid on the 1st day of July, 1907, the remaining installments payable respectively on the 1st day of July of each succeeding year until all installments are paid. Or will pay in full on ———.

"(Signed) ———."

Upon this subscription you have paid ——— dollars.

At a meeting of the board of trustees of the university held on Monday evening last, March 14, it was determined, after full discussion, that a just interpretation of this subscription is as follows:

1. That the subscriptions made on the above form were not conditional on the raising of \$400,000 or any other definite sum.

2. That the amount paid on such subscriptions should be carried, one-half to the building and site fund, the principal to be kept intact and the income to accumulate until new buildings or a new site are determined upon; and that the remaining one-half should be carried to current expenses and applied to enlarge the educational work of the university.

These conclusions were reached on the following grounds:

1. That, though when the subscriptions were made a particular site was under discussion, it was the understanding of all concerned that other sites and other buildings than those then proposed might be finally decided upon by the trustees.

2. There were two committees, one of which was attempting to raise a fund of \$200,000 for buildings and site, and the other to raise a fund of \$200,000 for current expenses for the enlargement of the educational work. These two committees united their efforts and prepared the form of subscription which you signed.

I am also instructed by the executive committee to say that in view of the fact that the maintenance of the university on the present standard requires a greater sum for annual current expenses than the amount of the annual receipts, it would be of great benefit to the university if you would change your present subscription so as to subscribe the same amount, ——— dollars, payable in three annual installments, to be used to meet the expected deficit for the current year and for the next two years, your present subscription of course to be canceled upon receipt of such new subscription.

I am further instructed to say that it is expected that a member of the board of trustees or an officer of the university will call upon you in regard to this matter.

Very respectfully,

Secretary of the University.

EXHIBIT G.

[Copy of a copy of a letter from Chas. W. Needham to R. D. Harlan. Original copy in "Letters B.—Executive committee and board of trustees, March 7, 1905, to ———," p. 287.]

MARCH 25, 1907.

DEAR DOCTOR HARLAN: You have already learned something of the comprehensive plans that have been formed by the trustees and faculties and friends of the George Washington University, looking toward the early realization of the statesmanlike ideal for a great national university at the capital of the nation which was placed before the American people by George Washington himself in his last will and testament.

To do this we must have a new, ample, and commanding site; suitable buildings; and a munificent endowment. It has already been proved that there is among the

citizens of the capital sufficient public spirit to provide a splendid site for an institution that is trying to show itself worthy of bearing the illustrious name of Washington.

But this is far more than a local enterprise, and this leads me, on behalf of our trustees, to make a suggestion which I hope will meet with your approval; it is that you join with us in bringing to the attention of patriotic men and women throughout the land the importance of developing, at the capital of the nation, a truly national university. Will you not join us in helping to bring such an inspiring plan to the attention of the American people?

I have been glad to learn that you expect to remain in the work of education; but while sojourning temporarily in Washington could you possibly perform a greater and more far-reaching service to education than by exerting, for a time, the best efforts in your power in helping to accomplish the large ends we have in view for the George Washington University? With the valuable experience you have had in college work and the knowledge you have acquired of the educational needs of the American people, and your wide acquaintance in different parts of the country, we believe that you can be of great assistance to us.

I make this suggestion the more readily because your distinguished father so many years has been connected with the law department of our university and has the success of the present movement much at heart.

Hoping to hear favorably from you, I am,

Sincerely yours,

CHAS. W. NEEDHAM.

REV. RICHARD D. HARLAN, D. D.

Exhibit H.

[Copy of a letter written by Chas. W. Needham to Rev. R. D. Harlan, D. D. Original copy in "Letters" Executive committee and board of trustees, March 7, 1905, to ——— B.—]

APRIL 4, 1907.

DEAR DOCTOR HARLAN: I am pleased to inform you that at the meeting of the executive committee you were appointed to represent the university movement in soliciting funds for the university, pursuant to my former letter of appointment of March 25, and your compensation was fixed at the rate of twenty-five hundred dollars per annum, beginning April 1, 1907, together with your traveling expenses, accounts to be approved by the treasurer, and in addition sums equal to the following percentages upon moneys collected by you and paid in to the treasurer as a result of your personal canvass and efforts:

Five (5) per cent upon all sums paid in up to one hundred thousand (100,000) dollars; four (4) per cent upon all sums paid in above one hundred thousand (100,000) up to one million (1,000,000) dollars, and two (2) per cent upon all sums above one million dollars; percentages at the above rates to be paid as moneys are received by the treasurer of the university.

As you requested, this appointment is to be considered as temporary and may be concluded by either party upon reasonable and due notice.

I wish to say again that it is a very great pleasure to have you associated in this work.

Sincerely, yours,

CHAS. W. NEEDHAM.

REV. RICHARD D. HARLAN, D. D.

EXHIBIT M 1.

[Copy of a copy of a letter from Chas. W. Needham to R. D. Harlan. Original copy in "Letters B. Executive committee and board of trustees, March 7, 1905, to ———," p. 463.]

NOVEMBER 13, 1908.

DEAR DOCTOR HARLAN: I am pleased to inform you that at the meeting of the board of trustees Tuesday evening your letter to me, dated November 9, which I referred to the committee of which Mr. Macfarland is chairman, was favorably reported to the board by the committee and the suggestions made in your letter were adopted by the board. This, therefore, modifies the present arrangement as follows:

(1) Your engagement with the university to continue until August 31, 1909.

(2) That if the board desires to continue your connection with the university after August 31, 1909, it will make a proposition to you on or before April 1 next.

(3) The payments to be made you hereafter will be on a salary basis, the salary to be fixed from time to time by the executive committee so as to cover the salary now being paid you and an additional amount equal to 5 per cent upon all sums paid in to the treasurer up to \$100,000, 4 per cent upon all sums paid in above \$100,000 up to \$1,000,000, and 2 per cent upon all sums above \$1,000,000, which you would have been entitled to under an arrangement stated in my letter to you of April 4, 1907.

It gives me pleasure to have this matter so satisfactorily arranged, and I trust that you may soon begin to reap a large harvest from your excellent sowing.

Sincerely, yours,

CHAS. W. NEEDHAM.

Dr. RICHARD D. HARLAN.

EXHIBIT M 2.

[Extract from president's report to the board of trustees, November 14, 1906, as found in record of trustees, vol. 6, p. 295.]

(a) *President's house.*—Owing to the increase in rents it has been exceedingly difficult for the president to find a suitable house near the university where members of the faculty and friends of the university could meet evenings—a matter of considerable importance to our work. Recently a modest house on N street, No. 1710, was offered for sale to close an estate at \$12,000. The lot is 19 by 96 feet, the house is 19 by 55 feet, three stories high. A change in the front entrance will give an extra room and enlarge the dining room. This, with repairs and decoration necessary, may cost \$2,000. The property is encumbered for \$5,500, bearing $4\frac{1}{2}$ per cent interest. Last week the owner offered to take \$11,000, if accepted at once.

The treasurer and assistant treasurer looked the property over with me and concluded that it was perfectly safe to put some of the university investment funds into the property, the president to occupy and pay the interest thereon. We therefore contracted for the house at \$11,000, to be conveyed to the treasurer and occupied by the president, the president to pay out of his salary the taxes, insurance, and 5 per cent interest upon the funds so invested. As the property is in a very desirable location, it is believed by all who have examined it that when the changes and repairs are made as proposed it would readily sell for \$15,000, thus making it a perfectly safe investment.

The income being assured the whole arrangement will be of mutual benefit to all concerned. I ask your approval of this action.

(Vol. 6, p. 298, same date, trustees approve above action.)

[Extract from minutes of trustee's meeting June 5, 1907, as found in record of trustees, vol. 6, p. 340.]

(12) On motion of Mr. Levering it was ordered that the executive committee be authorized, if upon investigation it was deemed proper and advisable, to use a portion of the proceeds of the sale of Van Ness Park for the floating debt of the university and to invest the balance, \$16,000, in 1710 N street at 4 per cent, and the remainder in income-paying securities, it being understood that when the university is ready to purchase a site said fund held for that purpose would be restored upon the credit of the university, the purpose being to save the interest during the time the fund was not required to purchase a site.

(Executive committee for 1907 consisted of the following: Messrs. Woodward, Greene, Mattingly, Gallaudet, Edson, Walcott, Larner, Jennings, and Perkins.)

EXHIBIT N.

Itemized expenses connected with No. 1710 N street (C. W. Needham's house).

| | | |
|-------|--|------------|
| 1906. | | |
| Dec. | 12. Interest, Riggs National Bank..... | \$123. 75 |
| 1907. | | |
| Mar. | 1. Repairs, C. S. Denham..... | 2, 000. 00 |
| Mar. | 5. Architect fee, P. Ash..... | 150. 00 |
| Mar. | 19. Range, Dodson & Hodgson..... | 42. 50 |
| Apr. | 19. Light bulbs, Potomac Electric Power Company..... | 13. 50 |
| Apr. | 25. Fixtures, The Enos Company..... | 170. 80 |
| Apr. | 27. Heating, Zellers & Co..... | 500. 00 |

2. If it is necessary for the president to indorse said negotiable paper, to save and keep him harmless and to secure the payment of said notes when issued, the board of trustees of the George Washington University does hereby declare and make the following declaration of trust; that is to say, the board hold in trust for the payment of said notes, and each and every one thereof, the following described real estate situate in the District of Columbia:

Corner Fifteenth and H streets, lots 9, 10, 11, and part 12, square 222, containing 20,210 square feet.

1325 to 1335 H street, subdivisions 33 and 34 and of subdivisions 5 and 6, square 250, containing 24,536 square feet.

The two foregoing-described properties being incumbered with a trust of \$450,000, due May 2, 1910.

Unimproved lots: Lot 9, square 16; lots 10, 12, 13, 8, square 13; lot 5, square 83; lot 8, square 23; lot 2, square west of 23; lot 5, square 87; lot 2, square 88; lot 148, square 672, containing 143,006 square feet, unincumbered.

And the board further declares that no other debt or obligation shall be incurred until the said notes are fully paid or provided for; that said indebtedness so to be created shall become a lien upon said described property or properties and every part thereof, and the said lien may be enforced by any and all legal means and procedure for the enforcement of equitable liens.

3. That the general policy of making this institution a true university with university standards and methods of teaching as presented by the president is hereby approved and will be maintained during the next academic year in accordance with the plans of organization and expense this day adopted.

I hereby certify that the foregoing is a correct copy of the resolution as adopted by the board of trustees.

Attest:

H. C. DAVIS, *Secretary*.

THE GEORGE WASHINGTON UNIVERSITY,
OFFICE OF THE PRESIDENT,
Washington, D. C., May 19, 1910.

To the honorable THE ATTORNEY-GENERAL OF THE UNITED STATES,
Washington, D. C.

SIR: In response to your letter of April 26, the president and board of trustees of the George Washington University beg to submit the following report with the detailed statements called for. These statements are marked and referred to in this report as exhibits and are preceded by a title-page of contents giving a summary of the several statements.

To present the information called for in your letter, and in the resolution referred to, in a clear and comprehensible form, it is essential that the organization of the university and the distribution of its courses of study in the several departments be explained.

The university embraces:

THE DEPARTMENT OF ARTS AND SCIENCES.

The faculty of graduate studies.

The faculty of undergraduate studies:

- (a) The College of Arts and Sciences.
- (b) The College of Engineering and Mechanic Arts.
- (c) The College of the Political Sciences.
- (d) The Teachers' College.
- (e) The Division of Architecture.

THE PROFESSIONAL DEPARTMENTS.

The department of law.

The department of medicine.

The department of dentistry.

National College of Pharmacy.

The College of Veterinary Medicine.

The colleges of pharmacy and veterinary medicine are organized under the charter of the university with independent boards of trustees (see charter handed you herewith, marked "1," pp. 23 and 24).

All students are matriculated in the department or college where they expect to do the major part of their work. This college has charge of the student and recom-

mends him to the trustees of the university for his degree. Each student, however, takes more or less of his work in other colleges and departments of the university. This is done in the interest of economy of administration and to prevent unnecessary duplication of courses in the university. Thus, for example, in the college of engineering and mechanic arts the technical courses only are given, and the student takes the general courses—mathematics, physics, English, geology, etc.—in the college of arts and sciences. In agricultural courses, chemistry and other general subjects are taken in the college of arts and sciences, and physiological chemistry, bacteriology, etc., are taken in the department of medicine. This arrangement gives each student in the university, wherever he may be registered, the benefit of all the courses offered in the university.

You will observe, therefore, that to give the details of instruction, and facilities for instruction, in the colleges of mechanic arts, architecture, veterinary medicine, and pharmacy presents only a partial statement of the courses and facilities offered in the university to students of agriculture and the mechanic arts. We have therefore submitted the full information, which your letter and the resolution calls for, by adding the facilities and courses of instruction in all departments of the university. We submit herewith a copy of the last catalogue of the university, marked "2." Pages 76 to 119 gives the courses of instruction in the department of arts and sciences. Preceding this you will find the required courses in the several colleges in undergraduate work, and following the references made you will find the special courses given in the professional departments of the university.

In determining what subjects and courses in the university would be entitled to receive the benefits of the Morrill acts, if extended to the District of Columbia and this university, we are guided by, and refer you to, the circular letter of the Department of the Interior, Bureau of Education, herewith submitted, marked "3."

With these explanations we beg to submit the following report with accompanying exhibits:

1. Detailed statements of the equipment of the departments of engineering, architecture, veterinary medicine and pharmacy are set forth in Exhibits A, B, C, and D, submitted herewith; and to complete the equipment in the subjects taught in the university, covered by the Morrill acts, there follows detailed statements of the equipment in other colleges and departments of the university, set forth in Exhibits E, F, G, H, I, and J.

The values attached represent, as near as can be ascertained, the present value of the equipment, considering in all cases the length of time the article has been used.

2. Exhibit K gives the class enrollment for the past three years in each of the subjects taught in the colleges of engineering, architecture, veterinary medicine, and pharmacy; and to complete the showing of the university, the class enrollments in other colleges and departments, in the subjects referred to, for the past three years, is set forth in Exhibit L.

The college of veterinary medicine was organized two years ago, and therefore has only a two years' record.

3. The salaries paid to individual professors in the colleges of engineering, architecture, veterinary medicine and pharmacy are set forth in Exhibits M, N, O, and P, and to complete the record as above explained the salaries paid to other professors in the university, teaching subjects covered by the Morrill acts, are set forth in Exhibits Q, R, S, T, U, V, and W.

4. Exhibit X gives the laboratory fees called for.

The total number of students enrolled in the university during the present academic year, 1909-10, is as follows:

| | |
|----------------------------|-------|
| Graduate studies..... | 87 |
| Undergraduate studies..... | 703 |
| Professional..... | 610 |
| | <hr/> |
| Duplicate names..... | 1,400 |
| | <hr/> |
| Total..... | 1,385 |

The teaching staff in the university consists of 174 members, as follows:

| | |
|---|-------|
| Professors..... | 74 |
| Assistant professors..... | 43 |
| Instructors, demonstrators, and assistants..... | 57 |
| | <hr/> |
| Librarian and assistants..... | 174 |
| | 8 |

The number of candidates for degrees this year, not yet passed by the faculties, will be approximately 200.

Prior to 1902 the university consisted of a collection of night schools, with the exception of Columbian College. Columbian College had a faculty of 11 professors, assistant professors, and instructors, with an enrollment of less than 90 students, and conducted its work in the daytime. The teaching staff were paid fixed salaries, the highest being \$1,800. The same professors conducted a night college, known as the Corcoran Scientific School, and for their services in this college received 75 per cent of all tuitions paid by the students attending the college; the university received 25 per cent of the fees for the use of the building and facilities for instruction. The medical and dental courses were carried on in the evening by two faculties. The members received all of the tuitions, paid all of the expenses, and divided the net proceeds. In the law department fixed salaries were paid to the professors and instructors, but the work was conducted under the direction of the faculty.

After many years of effort to secure financial aid for the university, organized as above set forth, it proved to be impossible to secure gifts of money for educational work so organized and conducted.

There being a large annual deficit with no prospect of securing aid, it was determined in 1902 to reorganize the university, bring all the work under the control and direction of the board of trustees and pay fixed salaries for all the work of instruction in all of the departments. It was also determined to put all of the work upon a day basis, commencing the work in the morning at 9 o'clock and closing the class room work at 6.30 in the afternoon. In order to serve a large body of students in Washington employed by the Government and as secretaries to executive officers, Senators, and Congressmen, the courses are arranged in each department so as to give ten hours a week in the afternoon between 4.30 and 6.30. This work is given by the same professors and is of the same quality and grade as that given in other hours of the day. In order to make all the work of equal grade and to maintain the values of the degrees, students taking the afternoon courses are required to take additional years to earn a degree. Thus in the arts and sciences a full-day student completes a course of 60 points in four years, while the afternoon student must take from five to six years. In the law department the full-day student earns the standard degree in a course of fourteen hours per week in three years, while the afternoon student, in a course of ten to eleven hours per week, is required to take four years. This arrangement holds true in all of the work in the university excepting the medical department. The medical department has only one course and that is a full-day course.

The standard of admission to the colleges of the university was raised to those required by all eastern colleges and universities, excepting in the professional schools, where the standard of admission is a four-year high-school course or its equivalent.

In endeavoring to meet the demands of many students in the District of Columbia, technical courses of college grade have been introduced. These technical courses are carried on in the colleges of engineering and mechanic arts, architecture, teachers' college, veterinary medicine, and pharmacy. As stated above, in order to do this work economically, the technical courses only are given in these colleges, and the general, sometimes called the cultural, courses in arts and sciences are given in the college of arts and sciences.

This change necessitated an increase in the current expenses of the university. In 1902 there were 11 professors, assistant professors, and instructors giving their entire time to the university; to-day there are 41. The library, which then consisted of only six or seven thousand volumes, now has over forty thousand volumes. The laboratories, which were meager, now are reasonably well equipped for the work which is being done. It was believed that by thus increasing the standards and efficiency of the university, and meeting the demands of the District, financial aid would be forthcoming and the increased expenses be met.

In order that you may be more fully advised of the educational plans and efforts of the university we submit herewith two documents, a report by the president, authorized to be published by the board of trustees, dated November 10, 1908, marked "4," and an address by the president entitled "The university and the District," marked "5."

The budget of expenses for the present year and the estimated income of the present year are set forth in the accompanying printed document, marked "6."

A reorganization of the finances of the university is in progress, as a result of which it is contemplated that the endowment funds will be restored to productive investment.

It is a question whether the provisions in House bill 24316, requiring tuition in the subjects therein mentioned at \$20 per year and prohibiting the use of any part of the appropriation for equipment—restrictions which it is understood are not imposed in

the case of any other allotment of the Morrill fund—will not render it impossible for the university to accept the responsibility of administering the fund.

In the event that any further information is desired by you or by the Congress of the United States we shall be pleased to furnish it upon request. If any statements or information furnished herewith is not clearly understood we shall esteem it a favor if you will give us an opportunity to explain and elucidate the same.

For the board of trustees of the George Washington University, we have the honor to be,

Very respectfully, yours,

CHAS. W. NEEDHAM, *President.*
C. H. STOCKTON,
H. C. PERKINS,
A. H. SNOW,
A. LISNER,
Committee of the Board of Trustees.

EXHIBITS REFERRED TO IN THE LETTER OF THE ATTORNEY-GENERAL.

EXHIBIT I.

ACTS OF CONGRESS, ACT OF THE LEGISLATIVE ASSEMBLY OF THE DISTRICT OF COLUMBIA, AND CERTIFICATE OF CHANGE OF NAME OF THE COLUMBIAN UNIVERSITY, TOGETHER FORMING ON MAY 1, 1909, THE CHARTER OF THE GEORGE WASHINGTON UNIVERSITY.

THE CHARTER OF THE GEORGE WASHINGTON UNIVERSITY.

AN ACT To incorporate the Columbian College in the District of Columbia.

Be it enacted, etc., That there be erected, and hereby is erected and established, in the District of Columbia, a college, for the sole and exclusive purpose of educating youth in the English, learned, and foreign languages, the liberal arts, sciences, and literature; the style and title of which shall be, and hereby is declared to be, "The Columbian College in the District of Columbia."

SEC. 2. *And be it further enacted,* That the said college shall be under the management, direction, and government of a number of trustees, not exceeding thirty-one, to be elected triennially, by the contributors to the said college, qualified to vote, in such manner, and under such limitations and restrictions, as may be provided by the ordinances of the college, on the first Monday in May; and that the first trustees of the said college shall consist of the following persons, namely: Obadiah B. Brown, Luther Rice, Enoch Reynolds, Josiah Meigs, Spencer H. Cone, Daniel Brown, Return J. Meigs, Joseph Gibson, Joseph Cone, Thomas Corcoran, Burgis Allison, Thomas Sewall, and Joseph Thaw; which said trustees, and their successors, shall forever hereafter be, and they are hereby declared to be, one body politic and corporate, with perpetual succession, in deed and in law, to all intents and purposes whatsoever, by the name, style, and title of "The Columbian College in the District of Columbia;" by which name and title, they, the said trustees, and their successors, shall be competent and capable, at law and in equity, to take to themselves and their successors, for the use of the said college, any estate, in any messuage, lands, tenements, hereditaments, goods, chattels, moneys, and other effects, by gift, grant, bargain, sale, conveyance, assurance, will, devise, or bequest, of any person or persons whatsoever: *Provided,* The same do not exceed, in the whole, the yearly value of twenty-five thousand dollars; and the same messuages, lands, tenements, hereditaments, and estate, real and personal, to grant, bargain, sell, convey, assure, demise, and to farm let, and place out on interest, for the use of the said college, in such manner as to them, or at least nine of them, shall seem most beneficial to the institution, and to receive the rents, issues, and profits, income, and interest, of the same, and to apply the same to the proper use and benefit of the said college; and by the same name to sue, commence, prosecute, and defend, implead and be impleaded, in any courts of law and equity, and in all manner of suits and actions whatsoever, and generally, by and in the same name, to do and transact all and every the business touching or concerning the premises.

SEC. 3. *And be it further enacted,* That the said trustees shall cause to be made for their use one common seal, with such devices and inscriptions thereon as they shall think proper, under and by which all deeds, diplomas, certificates, and acts of the

said college, shall pass and be authenticated; and the same seal, at their pleasure, to break and devise a new one.

SEC. 4. *And be it further enacted*, That the said trustees, or five of them at least, shall meet at the college, on College Hill, in the said District of Columbia, on the first Monday in March next, for the purpose of concerting and agreeing to such business as, in consequence of this act, shall be proper to be laid before them at the commencement of the work they have undertaken, and shall have power to adjourn from time to time, as they shall see cause, to any other times or places, for the purpose of perfecting the same. That there shall be a stated meeting of the said trustees held twice in every year at least, at such place and time as the said trustees, or a quorum thereof, shall appoint, of which public notice shall be given, after the first meeting, at least twenty days before [the] time of such intended meeting, whenever the president, to be appointed by them, shall deem the business of the institution to require the same, and give due notice thereof, which he is hereby authorized to do; and if at such stated or occasional meetings five of the said trustees shall not be present those of them who shall be present shall have power to adjourn the meeting to any other day, as fully and effectually to all intents and purposes as if the whole number of trustees for the time being were present; but if five or more of the said trustees shall meet at the said appointed times, or at any other time of adjournment, then such five of the said trustees shall be a board or quorum, and a majority of the votes of them shall be capable of doing and transacting all the business and concerns of the said college not otherwise provided for by this act, and particularly of making and enacting ordinances for the government of the said college; of electing and appointing the president, professors, and tutors for the said college; of agreeing with them for their salaries and stipends, and removing them for misconduct or breach of the laws of the institution; of appointing committees of their own body to carry into execution all and every the resolutions of the board; of appointing a president, treasurer, secretary, stewards, managers, and other necessary and customary officers for taking care of the estate and managing the concerns of the corporation; and, generally, a majority of voices of the board, or quorum of the said trustees, consisting of five persons at least, at any semiannual, occasional, or adjourned meeting, after notice given as aforesaid, shall determine all matters and things (although the same be not herein particularly mentioned) which shall occasionally arise and be incidentally necessary to be determined and transacted by the said trustees: *Provided always*, That no ordinances shall be of force which shall be repugnant to this charter or to the laws of the District of Columbia.

SEC. 5. *And be it further enacted*, That the head or chief master for the said college shall be called and styled "the president," and the masters thereof shall be called "professors and tutors;" but neither president, professors, or tutors, while they remain such, shall ever be capable of the office of trustee.

SEC. 6. *And be it further enacted*, That the president, professors, and tutors, or a majority of them, shall be called and styled "the faculty of the college," which faculty shall have the power of enforcing the rules and regulations adopted by the trustees for the government of the pupils, by rewarding or censuring them, and, finally, by suspending such of them as after repeated admonitions shall continue disobedient and refractory, until a determination of a quorum of the trustees can be had, and of granting and confirming, by and with the approbation and consent of a board of the trustees, signified by their mandamus, such degrees in the liberal arts and sciences, to such pupils of the institution, or others, who, by their proficiency in learning or other meritorious distinction, they shall think entitled to them, as are usually granted and conferred in colleges; and to grant to such graduates diplomas or certificates, under their common seal and signed by the faculty, to authenticate and perpetuate the memory of such graduation.

SEC. 7. *And be it further enacted*, That persons of every religious denomination shall be capable of being elected trustees; nor shall any person, either as president, professor, tutor, or pupil, be refused admittance into said college, or denied any of the privileges, immunities, or advantages thereof, for or on account of his sentiments in matters of religion.

SEC. 8. *And be it further enacted*, That no misnomer of the said corporation shall defeat or annul any gift, grant, devise, or bequest to or from the said corporation: *Provided*, The intent of the parties shall sufficiently appear upon the face of the gift, grant, will, or other writing, whereby any estate or interest was intended to pass to or from the said corporation.

SEC. 9. *And be it further enacted*, That the constitution of the said college herein and hereby declared and established shall be and remain the inviolate constitution of the said college forever; and the same shall not be altered or alterable by any ordinance or law of the said trustees: *Provided*, That it may be lawful for the Congress

of the United States to revoke and repeal this act at any and at all times whenever they shall think fit so to do.

SEC. 10. *And be it further enacted*, That it shall be the duty of the said board of trustees to keep a regular book or journal, in which shall be entered, under their direction, besides an account of all their ordinary acts and proceedings, all the by-laws, ordinances, rules, and regulations which may be adopted by the said board for their own government and for the government of the institution; also, a schedule of all the property and effects, real, personal, or mixed, which shall or may be vested in the said trustees, for the use of the said college, by virtue of any gift, grant, bargain, sale, will, or otherwise, together with annual statements concerning the accounts and finances of the institution. That it shall, moreover, be the duty of the said trustees to cause to be enrolled in the said book or journal the names of all the contributors to the institution qualified to vote for trustees, with their respective places of residence; and the said book or journal shall at all times be open to the inspection or examination of the Attorney-General of the United States; and when required by either House of Congress it shall be the duty of said trustees to furnish information respecting their own conduct, the state of the institution, and of its finances which shall or may be so required.

SEC. 11. *And be it further enacted*, That in case any vacancy or vacancies shall happen in the board of trustees aforesaid by death, inability, resignation, or otherwise, at any time between the stated or triennial elections, that then it shall and may be lawful for the other trustees, or any five of them, to proceed, at any subsequent meeting after the happening of such vacancy or vacancies, to choose, by ballot, any suitable person or persons to fill the same.

SEC. 12. *And be it further enacted*, That the employment or application of the funds or income of the said corporation, or any part thereof, for any purpose or object other than those expressed and defined in the first section of this act, or the investment thereof in any other mode than is described and provided in the second section thereof, shall be deemed and taken to be a forfeiture of all the rights and immunities derived from this act, and the same shall thenceforth cease and become null and void.

Approved, February 9, 1821.

(Stat. L., vol. 6, pp. 255-258, 16th Cong., 2d sess., ch. 10.)

AN ACT Granting certain city lots to the corporation of the Columbian College for the purposes therein mentioned.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there shall be, and hereby are, granted to the Columbian College, in the District of Columbia, lots in the city of Washington to the amount, in value, of twenty-five thousand dollars, which said lots shall be selected and valued by the commissioner of the public buildings, when requested by the trustees of the said college, and when the said lots shall be so selected and valued the same shall be vested in the said corporation in fee simple, to be by them held and disposed of in the manner following, that is to say the said corporation, by proper and lawful act or acts, under their corporate seal, shall sell and dispose of the said lots, as soon as reasonably practicable, for the best price or prices they can obtain; and shall vest the proceeds of the same in some public stock or in stock of some incorporated bank.

SEC. 2. *And be it further enacted*, That, when the lots aforesaid shall be selected and valued as aforesaid, the said commissioner shall make return of the numbers and description thereof to the clerk of the circuit court of the county of Washington, to be by him recorded among the records of land titles in the said county.

SEC. 3. *And be it further enacted*, That the proceeds of the sales aforesaid, so to be vested, shall not be otherwise used by the said trustees than as a capital, to be by them forever hereafter kept vested as aforesaid; and the dividends or interest therefrom accruing shall by them be used and applied in aid of the other revenues of the said college, to the establishment and endowment of such professorships therein as now are, or hereafter shall be, established by the said trustees, and to and for no other purpose whatever.

Approved, July 14, 1832.

(Stat. L., vol. 4, pp. 603-604; 22d Cong., 1st sess., ch. 248.)

AN ACT Supplemental to the "Act granting certain city lots to the corporation of the Columbian College for the purposes therein mentioned," approved the fourteenth day of July, eighteen hundred and thirty-two.

Be it enacted, &c., That the corporation of the Columbian College be, and hereby is, authorized to sell so many of the city lots, granted to said corporation by the act

to which this is supplemental, as shall be sufficient to raise the sum of seven thousand dollars, and to apply the proceeds of such sale to the payment of debts due from said corporation, anything in the act to which this is supplemental to the contrary notwithstanding.

Approved, February 28, 1839.

Stat. L., vol. 6, p. 751; 25th Cong., 3d sess., ch. 34.)

AN ACT For the relief of the Columbian College, in the District of Columbia.

Be it enacted by the legislative assembly of the District of Columbia,^a That the Columbian College, in the District of Columbia, chartered by and organized and acting under the act of Congress approved February nine, eighteen hundred and twenty-one, may,

^a The legislative assembly of the District of Columbia had its existence under the provisions of "An act to provide a government for the District of Columbia," approved February 21, 1871 (Stat. L., vol. 16, pp. 419-429; 41st Cong., 3d sess., ch. 62).

This act read in part as follows:

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That all that part of the territory of the United States included within the limits of the District of Columbia be, and the same is hereby, created into a government by the name of the District of Columbia, by which name it is hereby constituted a body corporate for municipal purposes, and may contract and be contracted with, sue and be sued, plead and be impleaded, have a seal, and exercise all other powers of a municipal corporation not inconsistent with the Constitution and laws of the United States and the provisions of this act.

"Sec. 2. And be it further enacted, That the executive power and authority in and over the District of Columbia shall be vested in a governor, who shall be appointed by the President, by and with the advice and consent of the Senate, and who shall hold his office for four years and until his successor shall be appointed and qualified. * * *

"Sec. 3. And be it further enacted, That every bill which shall have passed the council and house of delegates shall, before it becomes a law, be presented to the governor of the District of Columbia; if he approve, he shall sign it. * * *

"Sec. 5. And be it further enacted, That legislative power and authority in said District shall be vested in a legislative assembly, as hereinafter provided. The assembly shall consist of a council and house of delegates. * * *

"Sec. 7. And be it further enacted, That all male citizens of the United States above the age of twenty-one years, who shall have been actual residents of the District for three months prior to the passage of this act, except such as are *non compos mentis* and persons convicted of infamous crimes, shall be entitled to vote at said election, in the election district or precinct in which he shall then reside and shall have so resided for thirty days immediately preceding said election, and shall be eligible to any office within the said District, and for all subsequent elections twelve months' prior residence shall be required to constitute a voter; but the legislative assembly shall have no right to abridge or limit the right of suffrage. * * *

"Sec. 18. And be it further enacted, That the legislative power of the District shall extend to all rightful subjects of legislation within the District, consistent with the Constitution of the United States and the provisions of this act, subject, nevertheless, to all the restrictions and limitations imposed upon States by the tenth section of the first article of the Constitution of the United States; but all acts of the legislative assembly shall at all times be subject to repeal or modification by the Congress of the United States, and nothing herein shall be construed to deprive Congress of the power of legislation over said District in as ample manner as if this law had not been enacted. * * *

"Sec. 28. And be it further enacted, That the said legislative assembly shall have power to create by general law, modify, repeal, or amend, within said District, corporations aggregate for religious, charitable, educational, industrial, or commercial purposes, and to define their powers and liabilities: *Provided,* That the powers of corporations so created shall be limited to the District of Columbia. * * *

"Sec. 34. And be it further enacted, That a Delegate to the House of Representatives of the United States, to serve for the term of two years, who shall be a citizen of the United States and of the District of Columbia, and shall have the qualifications of a voter, may be elected by the voters qualified to elect members of the legislative assembly, who shall be entitled to the same rights and privileges as are exercised and

from the proceeds of any sale of its property, apply such sum as may be needful to pay its present indebtedness and place its libraries, buildings, and apparatus of instruction in good condition, and execute all deeds needful to quiet the title of property already sold.

SEC. 2. *And be it further enacted*, That the trustees of said college elected in May last shall constitute the corporation of said college until their successors in office shall be chosen and qualified as hereinafter provided, and may, until then, as vacancies occur in their number, temporarily fill them by the election of fit persons residing in the District of Columbia.

SEC. 3. *And be it further enacted*, That the said trustees shall meet in the law building of said college at noon, on the twenty-fifth day of June, eighteen hundred and seventy-two, for the purpose of choosing, and shall then and there, or at the time and place to which said meeting may be adjourned, elect thirteen trustees and thirteen overseers, who shall, upon their election, constitute the college corporation, and they and their successors shall thenceforward be, and be known and recognized as, the Columbian College in the District of Columbia.

SEC. 4. *And be it further enacted*, That the trustees chosen at the said meeting in June, eighteen hundred and seventy-two, or who may thereafter be chosen, shall be residents of the District of Columbia, and that at said meeting, and at any annual meeting of trustees and overseers to be thereafter held in said city of Washington on the Tuesday next preceding the last Wednesday in June, annually, the trustees and overseers in convention assembled shall fill vacancies in their board, and shall, by ballot, elect from among the trustees two suitable persons, one to be president and the other to be treasurer and secretary of said corporation and of the board of trustees, and shall establish ordinances and by-laws, or alter or repeal the same; and also frame laws and regulations for the college faculty and students in all the departments thereof, and by ballot elect such teachers, tutors, professors, lecturers, and president, and with such salaries and duties as said corporation may deem proper.

SEC. 5. *And be it further enacted*, That at said annual meetings not less than seven trustees and three overseers shall constitute a quorum for the transaction of any business except adjournment, and adjournment may be made by any member present; *Provided*, That a final adjournment shall not be delayed beyond one week after the time fixed for the annual meeting.

SEC. 6. *And be it further enacted*, That during the interval between said annual meetings the trustees shall, as now, hold semiannual, quarterly, monthly, and occasional meetings to fill temporarily, as the case may require, vacancies in the faculty or in their own board, and with all their present powers as modified by this act, subject to the ordinances and by-laws of the corporation; but no real estate or other property of said corporation shall, after the twenty-fifth day of June, eighteen hundred and seventy-two, be disposed of by the trustees, except by vote of the corporation or in pursuance of its ordinances.

Approved, July 25, 1871.

(Laws of the District of Columbia, 1871-72, pt. 2, pp. 21, 22. Acts of the first legislative assembly of the District of Columbia, 1st sess., ch. 18.)

AN ACT Supplemental to the act of February ninth, eighteen hundred and twenty-one, incorporating the Columbia[n] College, in the District of Columbia.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the act to incorporate the Columbia[n] College in the District of Columbia, approved February ninth, eighteen hundred and twenty-one, be, and the same is hereby, so modified that said corporation shall be hereafter known

enjoyed by the Delegates from the several Territories of the United States to the House of Representatives, and shall also be a member of the Committee for the District of Columbia."

The form of government by a governor and legislative assembly, with a Delegate in Congress, was abolished by "An act for the government of the District of Columbia, and for other purposes," approved June 20, 1874, Stat. L., vol. 18, pp. 116-121; 43d Cong., 1st sess., ch. 337). By this last act a form of government by a commission, consisting of three persons appointed by the President of the United States, by and with the advice and consent of the Senate, was instituted; and this form of government was continued, with some changes, by "An act providing a permanent form of government for the District of Columbia," approved June 11, 1878 (Stat. L., vol. 20, pp. 102-108; 45th Cong., 2d sess., ch. 180), which is the organic act of the District.

and called by the name of the Columbia[n] University, and in that name shall take, hold, and manage all the estate and property now belonging to said college, or that may hereafter be conveyed, devised, or bequeathed to said corporation by its original name; that the restriction of the yearly value of the property of the said corporation to the sum of twenty-five thousand dollars be, and the said restriction is hereby, repealed; and that said corporation may increase the number of its overseers to twenty-one, and the number of its trustees to twenty-one exclusive of the president of the faculty, who shall be ex officio a trustee of said corporation.

SEC. 2. That the act for the relief of the Columbian College in the District of Columbia enacted by the legislative assembly of said District, and approved July twenty-fifth, eighteen hundred and seventy-one, be, and the same is hereby, approved and confirmed: *Provided*, That this act nor the said act of the legislative assembly of the said District shall be so construed as to authorize the said Columbian University to sell or use the proceeds of any sale of land granted by Congress to said institution for any purpose other than that expressed in the act of incorporation and the act granting any such land or real estate, or contrary to any will, devise, or grant of any land or real estate heretofore or hereafter made by any person or persons to said institution.

Approved, March 3, 1873.

(Stat. L., vol. 17, p. 629; 42d Cong., 3d sess., ch. 328.)

AN ACT Supplementary to the act of March third, eighteen hundred and seventy-three, entitled "An act supplemental to the act of February ninth, eighteen hundred and twenty-one, incorporating Columbia College, District of Columbia.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the act of March third, eighteen hundred and seventy-three, ratifying and confirming the act for the relief of Columbian College in the District of Columbia, enacted by the legislative assembly of the said District, and approved July twenty-fifth, eighteen hundred and seventy-one, be so modified as to authorize the trustees and overseers of the Columbian University to hold their annual meeting on such day in May or June as the said trustees and overseers shall appoint, instead of being held on "the Tuesday next preceding the last Wednesday in June."

Approved, May 31, 1878.

(Stat. L., vol. 20, p. 88; 45th Cong., 2d sess., ch. 147.)

AN ACT To amend the act of March third, eighteen hundred and seventy-three, for the relief of the Columbian University, in the District of Columbia.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the act approved March third, eighteen hundred and seventy-three, entitled "An act supplemental to the act of February ninth, eighteen hundred and twenty-one, incorporating the Columbian College, in the District of Columbia," be, and the same is, so modified that hereafter the treasurer and secretary of said corporation, the Columbian University, need not be one person nor a member of the trustees of said corporation, but the trustees and overseers of said corporation, in convention assembled, shall annually elect by ballot two suitable persons from among the trustees or not, as they may deem proper, one to be treasurer and the other secretary of said corporation and of the board of trustees.

SEC. 2. That in case of the death, resignation, or inability to act of either the treasurer or secretary, the board of trustees shall have power to fill the vacancy until his successor is duly elected.

Approved, January 14, 1893.

(Stat. L., vol. 27, p. 420; 52d Cong., 2d sess., ch. 38.)

AN ACT Supplemental to the act of February ninth, eighteen hundred and twenty-one, incorporating the Columbian College, in the District of Columbia, and the acts amendatory thereof.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Columbian University, on and after the first day of June, eighteen hundred and ninety-eight, shall be under the management and con-

trol of a board of trustees, consisting of twenty-two members; the president of the university shall be ex officio a member of said board, and the remaining twenty-one shall be divided into three classes with seven members in each class; a majority of said board shall be residents of the District of Columbia, and seven members shall constitute a quorum for the transaction of business. That on or before the thirty-first day of May, eighteen hundred and ninety-eight, a meeting of the trustees and overseers of said university shall be held, and said meeting shall elect twenty-one trustees, seven of whom shall be designated to serve from the first day of June, eighteen hundred and ninety-eight, until the annual meeting in eighteen hundred and ninety-nine; and seven from the same date until the annual meeting in nineteen hundred; and seven until the annual meeting in nineteen hundred and one. Two-thirds of said trustees, and also the president of the university, shall be members of regular Baptist churches; that is to say, members of churches of that denomination of Protestant Christians now usually known and recognized under the name of the regular Baptist denomination; said trustees so elected shall serve for the periods mentioned and until their successors are elected. That on the first day of June, eighteen hundred and ninety-eight, the terms of office of the present trustees and overseers shall cease and determine, and thereupon the control and management of said university, its property and trusts, shall vest in the board of trustees, elected as hereinabove provided, and their successors.

SEC. 2. That at the annual meeting in eighteen hundred and ninety-nine, and annually thereafter, there shall be elected by the board of trustees seven trustees to fill the places of the class whose terms of office expire; and the board of trustees may prescribe in a by-law the mode of nominating persons for election as trustees. A failure to elect trustees at the annual meeting shall not create vacancies in the board, but such election may be had and vacancies occurring during the year may be filled for the unexpired term by the board at any general or special meeting.

SEC. 3. That the board of trustees provided for herein shall have, and they are hereby given, full power and authority to appoint and remove any and all officers, professors, lecturers, teachers, tutors, agents, and employees who are now or may hereafter be elected or appointed; they may, by a vote of two-thirds of all the trustees constituting said board, adopt and change by-laws for the conduct of the business and educational work of said university; they may appoint an executive committee composed of trustees, designate the number and chairman thereof, with such powers and authority as are usually exercised by an executive committee, and which shall be conferred by the board, subject always to the control of the board of trustees; they may create and establish schools and departments of learning to be connected with and become a part of said university; they may receive, invest, and administer endowments and gifts of money and property for the maintenance of educational work by said university, and by any department and chair thereof now established or which may hereafter be created or established by said university; and they shall have all the powers and authority heretofore granted to and vested in the trustees and overseers of said university.

SEC. 4. That the annual meeting of the board of trustees shall be held in the city of Washington, District of Columbia, on the Wednesday nearest the first day of June in each year; two other stated meetings shall be held on the second Wednesday of October and January in each year, and special meetings may be called by the president of the university or by the executive committee or by seven members of the board of trustees upon such notice and at such hour and place as may be designated in the by-laws; at all meetings any business necessary to be transacted may be considered and acted upon, and any meeting may be adjourned from time to time by the trustees present, whether constituting a quorum or not, notice of such adjournment to be given, as of called meetings, to those trustees not present.

SEC. 5. That the terms of office of the president of the university, the treasurer and other officers, professors, and lecturers, and the employment of agents and employees, and the title to all the property and rights in and management of the endowment funds of the university shall not be affected by the change of management herein provided for, but they shall continue and be subject to the control and management of the board of trustees hereby created the same as they are now subject to the control and management of the corporation.

SEC. 6. That all acts and parts of acts inconsistent with the provisions of this act are hereby repealed.

Approved, March 18, 1898.

(Stat. L., vol. 30, pp. 328, 329; 55th Cong., 2d sess., ch. 72.)

AN ACT Supplemental to the act of February ninth, eighteen hundred and twenty-one, incorporating the Columbian College in the District of Columbia, and the acts amendatory thereof.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the act to incorporate the Columbian College, in the District of Columbia, approved February ninth, eighteen hundred and twenty-one, and the amendatory act approved March eighteenth, eighteen hundred and ninety-eight, be, and the same are hereby, amended by repealing and striking out of the said charter the following words in lines twenty to twenty-five in section one of the said amendatory act of March eighteenth, eighteen hundred and ninety-eight, namely, "Two-thirds of said trustees, and also the president of the university, shall be members of regular Baptist churches; that is to say, members of churches of that denomination of Protestant Christians now usually known and recognized under the name of the regular Baptist denomination."

SEC. 2. That section thirteen of the original charter of February ninth, eighteen hundred and twenty-one, which provides "That persons of every religious denomination shall be capable of being elected trustees; nor shall any person, either as president, professor, tutor, or pupil, be refused admittance into said college, or denied any of the privileges, immunities, or advantages thereof, for or on account of his sentiments in matters of religion," be, and the same is hereby, reenacted and shall be hereafter in full force as a part of said charter.

SEC. 3. That power is hereby given to the board of trustees of said university to change the name of said university at any regular meeting by a vote of not less than two-thirds of the total number of members of the board, as prescribed by the charter, subject to the approval of the Secretary of the Interior and the Commissioner of Education. That upon said action being taken a certificate, under the seal of the university, stating the name adopted and the date when the name shall go into effect not less than thirty days nor more than six months from the date of its adoption, together with the fact that said name has been adopted as herein prescribed, shall be filed in the office of the recorder of deeds of the District of Columbia, and thereupon, upon the date specified for the name to go into effect, the university shall be known and designated by the name adopted, and by said new name the said university shall be vested with and convey its real estate, hold, control, and administer endowments and gifts of money and property heretofore and hereafter made for the maintenance of its educational work, and do and perform all acts which it now has the power to do under its said charter. Such change of name shall not in any other way change, affect, or modify in any degree the rights, privileges, obligations, and powers of the said university under the charter of February ninth, eighteen hundred and twenty-one, and the amendatory acts thereto.

SEC. 4. That all acts and parts of acts inconsistent with this act are hereby repealed.

Approved, January 23, 1904.

(Stat. L., vol. 33, part 1, pp. 7, 8; 58th Cong., 2d sess., ch. 7.)

CERTIFICATE OF CHANGE OF NAME OF THE COLUMBIAN UNIVERSITY TO "THE GEORGE WASHINGTON UNIVERSITY."

DISTRICT OF COLUMBIA, *City of Washington:*

The Columbian University, in accordance with the act of Congress approved January 23, 1904, does hereby certify that, at the regular meeting of its board of trustees duly held on the 8th day of June, 1904, at which meeting there were present more than two-thirds of the total number of members of the board, it was unanimously resolved that, subject to the approval of the Secretary of the Interior and the Commissioner of Education, prescribed by said act of Congress, the name of this university be changed to that of The George Washington University, the same to go into effect on the 1st day of September, A. D. 1904.

And it is hereby further certified, that on the 20th day of June, A. D. 1904, the Secretary of the Interior and the Commissioner of Education duly approved in writing said change of name, which said written approval is hereto attached and made a part hereof.

In testimony whereof, said Columbian University has given this its certificate under its corporate seal, at the city of Washington, D. C., on the 21st day of June, A. D. 1904.

[SEAL.]

CHARLES W. NEEDHAM, *President.*

Attest:

JOHN B. LARNER, *Secretary.*

UNITED STATES OF AMERICA,
DEPARTMENT OF THE INTERIOR,
Washington, D. C., June 20, 1904.

Pursuant to section 882 of the Revised Statutes, I hereby certify that the annexed paper is a true copy of the original as it appears upon the files of the department.

In testimony whereof I have hereunto subscribed my name and caused the seal of the Department of the Interior to be affixed the day and year first above written.

[SEAL.]

E. A. HITCHCOCK, *Secretary of the Interior*.
W. B. A.

Whereas by act of Congress, approved January 23, 1904, the Columbian University was authorized to change its name, subject to the approval of the Secretary of the Interior and the Commissioner of Education; and

Whereas it has been made satisfactorily to appear to us that, at the regular meeting of the board of trustees of said university, held on the 8th day of June, A. D. 1904, at which meeting there were present more than two-thirds of the total number of members of said board, it was unanimously resolved to change the name of said university to that of The George Washington University, the same to go into effect on the 1st day of September, A. D. 1904:

Now, therefore, this is to witness that, pursuant to said act of Congress, we do hereby, this 20th day of June, A. D. 1904, approve said change of name.

[SEAL.]

E. A. HITCHCOCK, *Secretary of the Interior*.
W. T. HARRIS, *Commissioner of Education*.

OFFICE OF THE RECORDER OF DEEDS,
DISTRICT OF COLUMBIA.

This is to certify that the foregoing is a true and verified copy of the certificate of change of name of the Columbian University to The George Washington University, and of the whole of said certificate of change of name, as filed in this office the 22d day of June, 1904, and recorded in Liber No. 16, folio 95 et seq., one of the incorporation records of the District of Columbia.

In testimony whereof I have hereunto set my hand and affixed the seal of this office this 11th day of February, A. D. 1910.

[SEAL.]

R. W. DUTTON,
Deputy Recorder of Deeds, District of Columbia.

AN ACT Supplemental to the act of February ninth, eighteen hundred and twenty-one, incorporating the Columbian College in the District of Columbia, and the acts amendatory thereof.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That The George Washington University shall have, and is hereby given, power to increase the number of its trustees from time to time, by a two-thirds vote of the whole number of the trustees at the time such vote is taken, to a number not exceeding forty-five. In case of the increase of the number of trustees a certificate, stating the number of the board and the time when it shall go into effect and that the action so taken was by a two-thirds vote as required by this act, shall be filed with the recorder of deeds of the District of Columbia, and upon and after the date named the board shall consist of the number of trustees stated in such certificate, and said board may also appoint a board or boards of visitors for any department or departments of educational work carried on by the university, such boards of visitors to be advisory only.

SEC. 2. That by and with the consent of said university, colleges may be organized hereunder for the purpose of carrying on, in connection with the university, special lines of educational work in the arts, sciences, and liberal and technical knowledge, such colleges to be educationally a part of the system of the university, but upon independent financial foundations, and to this end any five or more persons desirous of associating themselves for the purpose of establishing a college hereunder may make, sign, and acknowledge before any officer authorized to take acknowledgment of deeds in the District of Columbia, and with the assent of the university in writing, file in the office of the recorder of deeds of the said District a certificate in writing,

in which shall be stated: First, the intention to organize a corporation under this act and the assent of the university thereto; second, the name or title by which the college shall be known in law; third, the names of the trustees constituting the first board, and such trustees may be divided into three classes, the term of office of one class expiring annually; fourth, the manner of nominating and electing successors to said trustees; fifth, the branch or branches of literature, arts, science, liberal or technical knowledge proposed to be taught; sixth, that the highest officer of said college shall be a dean, the dean and members of the faculty to be members of the educational councils of the university in accordance with the rules governing the university; seventh, that all degrees shall be bestowed by the university; eighth, that in all financial and legal responsibility the college shall be an independent organization. Upon filing such certificate the trustees named therein and their successors shall be a body politic, incorporated by the name and style stated in the certificate, and by that name and style shall have perpetual succession in association with the university, with power in the college to sue and be sued; plead and be impleaded; to acquire, hold, and convey property in all legal ways; to receive by gift, devise, or otherwise, and hold, control, and administer endowments and gifts of money and property thereafter made to it for the maintenance of its educational work; to have and use a common seal, and to alter and change the same at pleasure; to make and alter from time to time such by-laws, not inconsistent with the Constitution of the United States or the laws in force in said District or the laws of the university regulating the conduct of educational work, as may be deemed necessary for the government of the college, but said college shall not confer academic or honorary degrees; such college shall hold the property of the institution and all moneys and property conveyed to it by purchase, gift, conveyance, will, devise, or bequest solely for the purposes of the educational work specified in said certificate; the trustees of such college shall faithfully apply all funds collected or received and the proceeds thereof belonging to the institution, according to their best judgment, in purchasing lands and erecting buildings, supporting necessary officers, instructors, and servants, and procuring all equipment, educational and otherwise, necessary to carry on the work of the college.

SEC. 3. That said university may enter into affiliated agreements with any institutions of learning outside of the District of Columbia for the purpose of giving to students of such institutions the educational facilities of said university and the departments of the Government in the city of Washington which are by law open to students upon such terms as are mutually agreed upon by the said university and the affiliated institutions.

Approved, March 3, 1905.

(Stat. L., vol. 33, pt. 1, pp. 1036, 1037; 58th Cong., 3d sess., ch. 1467.)

EXHIBIT 2.

[This consists of a copy of the George Washington University Bulletin, June, 1909, catalogue number, a volume of 281 pages, and not deemed necessary to be printed herewith.]

EXHIBIT 3.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, D. C., November 26, 1900.

To presidents, treasurers, and boards of control of state colleges of agriculture and mechanic arts, and of institutions of like character for the education of colored students:

GENTLEMEN: Your attention is respectfully called to the requirements of the act of Congress approved August 30, 1890, in aid of the land-grant colleges of agriculture and the mechanic arts, respecting the annual reports of the presidents and treasurers of said institutions to the Secretary of Agriculture and the Secretary of the Interior, and to certain decisions respecting the disbursement of the funds authorized by the said act.

1. The annual reports of treasurers are required to be made on or before September 1 of each year (sec. 2).

2. The reports of presidents must be received before the States can be certified for the annual installments of this fund, and it is respectfully requested that they be forwarded to this office not later than September 1 of each year.

3. The funds annually appropriated by the act of August 30, 1890, must be expended during the year for which they are appropriated and for the purposes specified in the

said act, and can not be allowed to accumulate in the form of an unexpended balance or be invested as a permanent interest-bearing fund (decision of the Assistant Attorney-General, June 20, 1899). The department will insist on the expenditure annually of substantially the entire amount appropriated by the act of August 30, 1890, and boards of control of agricultural and mechanical colleges are requested to make provision for such expenditures. It is understood, of course, that contracts may be entered into for machinery or other educational material which, for good reasons, may not be ready and paid for until the following year. In such cases it is sufficient to explain, by a note in the report, that the balance is held for the purpose of liquidating bills already incurred, and stating the nature of the outstanding contracts.

4. The funds are "to be applied only to instruction in agriculture, the mechanic arts, the English language, and the various branches of mathematical, physical, natural, and economic science, with special reference to their applications in the industries of life, and to the facilities for such instruction." It is held that this language authorizes the purchase from this money of apparatus, machinery, text-books, reference books, stock and material used in instruction, or for the purposes of illustration in connection with any of the branches enumerated, and the payment of salaries of instructors in said branches only.

5. The expenditure of any portion of these funds "for the purchase, erection, preservation, or repair of any building or buildings" under any pretense whatever is specifically prohibited by the act (sec. 3), and the purchase of land is not allowable (decision of Assistant Attorney-General, March, 1891).

6. The salaries of purely administrative officers, such as presidents, treasurers, secretaries, bookkeepers, janitors, watchmen, etc., can not be charged to this fund (decision of Assistant Attorney-General, March 7, 1894), nor can it be expended for heating or lighting buildings, musical instruments, furniture, cases, shelving, desks, lockers, salaries of instructors in philosophy, psychology, ethics, logic, history, political science, civics, pedagogy, and in ancient and modern languages (except English). When an administrative officer also gives instruction in any of the branches of study mentioned in the act of August 30, 1890, or when an instructor gives such instruction and also devotes part of his time to giving instruction in branches of study not mentioned in the said act, only a part of such person's salary proportionate to the time devoted to giving instruction in the branches of study mentioned in the said act of August 30, 1890, can be charged to these funds.

7. In order that greater uniformity in the reports of treasurers may be obtained in the future, the following classification of subjects that may be included under the several schedules has been prepared, such classification to be adhered to by the treasurers of the various institutions in the preparation of their annual reports:

SCHEDULE A.—*Instruction in agriculture.*—(1) Agriculture, (2) horticulture, (3) forestry, (4) agronomy, (5) animal husbandry, (6) dairying, (7) veterinary science, (8) poultry industry, (9) apiculture.

SCHEDULE B.—*Instruction in mechanic arts.*—(1) Mechanical engineering, (2) civil engineering, (3) electrical engineering, (4) irrigation engineering, (5) mining engineering, (6) marine engineering, (7) railway engineering, (8) experimental engineering, (9) textile industry, (10) architecture, (11) machine design, (12) mechanical drawing, (13) ceramics, (14) stenography, (15) typewriting, (16) telegraphy, (17) printing, (18) shop work.

SCHEDULE C.—*Instruction in English language.*—(1) English language, (2) English literature, (3) composition, (4) rhetoric, (5) oratory.

SCHEDULE D.—*Instruction in mathematical sciences.*—(1) Mathematics, (2) book-keeping, (3) astronomy.

SCHEDULE E.—*Instruction in natural and physical sciences.*—(1) Chemistry, (2) physics, (3) biology, (4) botany, (5) zoology, (6) geology, (7) mineralogy, (8) metallurgy, (9) entomology, (10) physiology, (11) bacteriology, (12) pharmacy, (13) physical geography, (14) meteorology.

SCHEDULE F.—*Instruction in economic sciences.*—(1) Political economy, (2) domestic economy, (3) commercial geography.

Very respectfully,

W. T. HARRIS, *Commissioner.*

Approved, December 7, 1900.

E. A. HITCHCOCK, *Secretary.*

EXHIBIT 4.

REPORT OF PRESIDENT CHARLES W. NEEDHAM TO THE BOARD OF TRUSTEES.

[November 10, 1908.]

Approved and ordered printed by the board of trustees, November 10, 1908.

HENRY B. F. MACFARLAND, *Chairman*.
EDWARD M. GALLAUDET, LL. D.
Vice-Chairman.
WILLIAM F. MATTINGLY, LL. D.
EUGENE LEVERING.
SAMUEL H. GREENE, D. D., LL. D.
THEODORE W. NOYES, LL. M.
SAMUEL W. WOODWARD.
JOHN B. LARNER, LL. D.

JOHN JOY EDSON, LL. B.
FRANCIS G. NEWLANDS, LL. D.
CHARLES W. RICHARDSON, M. D.
CHARLES D. WALCOTT, LL. D.
HARRY C. YARROW, M. D.
FRANK C. HENRY, Phar. D.
HENNEN JENNINGS, C. E.
HENRY C. PERKINS.
THOMAS H. ANDERSON.

HARRY C. DAVIS, *Secretary*.

NOVEMBER 10, 1908.

To the BOARD OF TRUSTEES OF

THE GEORGE WASHINGTON UNIVERSITY.

GENTLEMEN: The fiscal year including the academic year 1907-8 closed on August 31, 1908. The total number of students enrolled during the year was 1,258, of which number 28 were from 18 foreign countries, and 1,230 were from the United States, representing 50 States and Territories and the District of Columbia. They were enrolled in the following departments:

| | |
|----------------------------|---------|
| Graduate studies..... | 94 |
| Undergraduate studies..... | 549 |
| Professional..... | 639 |
| | — 1,282 |
| Duplicated names..... | 24 |
| Total..... | 1,258 |

The teaching staff consisted of 215 members, as follows:

| | |
|---|----|
| Professors..... | 87 |
| Assistant professors..... | 38 |
| Instructors, demonstrators, and assistants..... | 76 |
| Lecturers..... | 14 |

The number of graduates during the year was 255, distributed as follows:

| | |
|--|----|
| Bachelor of arts ^a | 24 |
| Bachelor of science..... | 9 |
| Bachelor of science in chemistry..... | 1 |
| Bachelor of science in civil engineering..... | 4 |
| Bachelor of science in electrical engineering..... | 2 |
| Bachelor of science in mechanical engineering..... | 3 |
| Bachelor of science in architecture..... | 1 |
| Doctor of medicine..... | 51 |
| Doctor of dental surgery..... | 19 |
| Doctor of pharmacy..... | 8 |
| Bachelor of laws..... | 87 |
| Master of laws..... | 9 |
| Master of patent laws..... | 23 |
| Master of arts..... | 5 |
| Master of science..... | 2 |
| Civil engineer..... | 2 |
| Electrical engineer..... | 1 |
| Doctor of philosophy..... | 2 |
| Doctor of civil law..... | 1 |
| Master of diplomacy..... | 1 |

255

| | |
|--|---|
| Four honorary degrees ^b | 4 |
|--|---|

Total..... 259

^a Two with teacher's diploma.

^b Two doctors of music, 2 doctors of laws.

It is well for us at this time to review the advances made under the present policy of the university.

In the year 1898 the department of comparative jurisprudence and diplomacy was organized. It was a graduate school with a two years' course of ten hours per week, leading to the degree of master of diplomacy, and a three years' course leading to the degree of doctor of civil law. In 1900 the regular course for the degree of bachelor of laws in the law department was increased from two to three years, with ten hours of class-room work per week; the admission requirements were advanced to a four-year high-school course or its equivalent; the method of teaching was improved. The school was admitted into the "Association of American Law Schools," and the number of students in this department increased from 243 to over 500 in 1902.

Beginning in the fall of 1902 a policy of administration was adopted, the purpose of which was to change the character of the whole university and to gradually convert it from a collection of night schools into a full day university, doing work of university grade in all departments. The Corcoran scientific school, conducting college work in the evening, was discontinued, and all the work in liberal arts was merged into one department of arts and sciences, with class-room hours beginning at 9 o'clock in the morning and closing at 6.30 in the evening.

Columbian college was organized to carry on the undergraduate work in the liberal arts courses, leading to the bachelor of arts degree. The registration in this college at this date is 257, 48 in excess of last year's full registration. These students are of fine quality, earnest and enthusiastic in their work and in their support of the university.

The college of engineering was organized in 1905, and it is gratifying to report a steady growth in the number of students and in the amount and quality of the technical work. There are registered to this date 177 students in engineering, 27 over the total registration last year. No better body of students can be found in any institution than is now enrolled in this college.

Professional teachers, giving their whole time, were introduced into the law school; the hours changed from the evening to the afternoon; ultimately full-day work and the case system of teaching were adopted.

The department of medicine was brought under the full control of the university trustees; professional teachers giving their whole time were added to the faculty; laboratory and clinical methods of teaching were introduced, and to-day only full-day students are matriculated.

The department organized under the title of Comparative Jurisprudence and Diplomacy was reorganized and is now the College of the Political Sciences, with professional and full-day teachers, with a separate building, and is carrying on two years of undergraduate and two years of graduate work in the political sciences. It has about 80 students enrolled.

The division of education has professional teachers and a separate building, with over a hundred students. The division of architecture has over 50 students of excellent grade. These divisions are each in charge of professors giving full time to the work.

In 1905-6 the reorganization was well under way, the standards of admission in the various departments raised and the work gradually improved. Since that time constant progress has been made, tuition fees have been increased, and full-day work is required to complete the course in the minimum time allowed for earning degrees. Those doing less than full-day work are required to take from one to two years longer to complete their courses. To carry out this policy 42 professors, instructors, and assistants are now employed on full time as against 11 on full time in 1897.

In order that a clearer idea may be gained of the progress, at different periods, of the changes wrought out under the new policy and to show the increased cost in the education of students, a comparative statement is here given. "Full-day" students are those giving their whole time to study. "Half-day" students are those in the bureaus of the government service, secretaries to Senators, Congressmen and committees, who are taking ten hours of class-room work per week. "Special" students are those taking on the average from six to seven hours per week.

| | 1896-7. | 1900-1. | 1903-4. | 1905-6. | 1907-8. |
|---|--------------------|--------------|--------------|--------------------|--------------------|
| Students' fees..... | \$38,513.22 | \$95,664.09 | \$104,656.42 | \$111,066.11 | \$105,378.99 |
| Number of students..... | ^a 997 | 1,415 | 1,386 | 1,508 | ^a 1,197 |
| Average received from students, all classes..... | \$38.60 | \$67.60 | \$75.50 | \$73.65 | \$88.04 |
| Expenditure for education..... | \$62,907.02 | \$115,018.83 | \$121,633.47 | \$142,561.11 | \$167,635.71 |
| Average expenditure per student..... | \$63.00 | \$81.28 | \$87.76 | \$94.53 | \$140.00 |
| Percentage of expense paid by students' fees..... | 61.03 | 83.02 | 86.00 | 78.00 | 63.00 |
| Professors on full time..... | 11 | 11 | 11 | 17 | 20 |
| Assistant professors on full time..... | | 1 | 1 | 4 | 12 |
| Instructors on full time..... | | 1 | 3 | 3 | 6 |
| Total teachers on full time..... | 11 | 13 | 15 | 24 | 38 |
| Students, full-day..... | 71 | 161 | 172 | 203 | 436 |
| Students, half-day..... | 754 | 1,012 | 945 | 1,027 | 498 |
| Students, special..... | 188 | 242 | 269 | 381 | 351 |
| Students, total..... | ^b 1,013 | 1,415 | 1,386 | ^b 1,611 | ^b 1,285 |

^a Does not include students in departments of pharmacy and veterinary medicine.

^b Includes students in pharmacy and veterinary medicine.

The statistics for the present year are most encouraging. The term opened September 30, and registration is not complete, and does not of course show the number that will enter for the second semester. The number of students registered to date is 1,330, as follows:

| Department. | Full day. | Half day. | Special. | Total. |
|--------------------------------------|-----------|-----------|----------|--------|
| Graduate studies..... | 92 | | | 92 |
| Columbian college..... | 95 | 71 | 91 | 257 |
| College of engineering..... | 43 | 59 | 75 | 177 |
| Architecture..... | 11 | 10 | 29 | 50 |
| College of political sciences..... | 10 | 11 | 57 | 78 |
| Education (arts and crafts, 26)..... | 12 | 21 | 70 | 103 |
| Medicine..... | 95 | 54 | | 149 |
| Dentistry..... | | 29 | | 29 |
| Law..... | 85 | 170 | 34 | 289 |
| College of pharmacy..... | | 71 | | 71 |
| Veterinary medicine..... | | 35 | | 35 |
| Total..... | 443 | 531 | 356 | 1,330 |

(For list of students' names, see University Bulletin, issued October 31, and accompanying this report.)

From these statistics we see that in 1896-7 there were registered in the university only 71 full-day students. To-day we have 443 students in the university giving their whole time and taking regular work throughout the day for degrees, averaging not less than fifteen hours a week. This number will probably reach 500 during the year. The half-day students number 531 and do their work in the early morning and in the afternoons on a schedule of ten hours a week in course for degrees. The special students number 356 and average six hours per week. In 1896-7 there were 11 teachers on full time; to-day there are 42. The standard of admission in all departments, excepting the dental, pharmacy, and veterinary medicine, is the regular standard college entrance requirement in the best institutions—practically an approved four-years' high-school course.

The present student body is exceptionally good material, well qualified to do the work entered upon, and filled with loyalty and enthusiasm. To those familiar with the former conditions in the university there is a very marked difference in the quality of the pupil material. Those admitted prior to 1902 did not come in upon the standard now required. In the professional schools there was no systematic requirement for admission. In the then scientific school students were admitted "experimentally," and if they could go on with the work were continued; if they could not they fell out by the way, as many of them did. In our work last year the total loss from all causes on the total registration of 1,258 was only 11 per cent.

Every institution must ultimately be measured by the intellectual and moral qualities of its student body and by the number who are making the acquirement of education their prime and sole object during their student years. Thus valued, our university

stands to-day immeasurably in advance of where it stood in 1902. Our work to-day receives full credit in every reputable institution, while the members of our faculty find cordial reception in educational circles wherever they go.

Another test of an institution of learning, and one which determines largely its standing, is the educational facilities which it possesses, such as libraries and laboratories. In 1902 there were neither books nor reading room in the department of medicine. The library of the department of law had been growing for three years and had about 2,500 volumes. The department of arts and sciences had a library room, without librarian or caretaker, and two or three thousand volumes of books so old that they were rarely consulted by students or professors. In fact, the room was used as a lounging and conversation room. To-day the medical school has a well-equipped library and reading room for students, containing between 2,500 and 3,000 volumes. The law school has an excellent working library of between six and seven thousand volumes, and the department of arts and sciences has over 30,000 volumes. We expect to have, before the year closes, in all departments, approximately 40,000 volumes. The old reading room in the main building is now used entirely as a stack room, and other space has been given to readers. Our books are standard works and well selected treatises, giving our students excellent materials for work. These libraries are in charge of a most capable and experienced librarian, with an assistant librarian, and six student assistants.

By the opening of rented houses and readjustment of space in the old buildings we have provided the following:

Electrical engineering laboratory.

Mechanical engineering laboratory.

Drafting rooms.

Cement testing laboratory.

Assay laboratory.

General offices for administration.

Departmental libraries.

Club room for men students.

Students' publications office.

Offices for professors.

Quarters for women students and fraternities.

Electric lighting and telephone service.

Our laboratory facilities are many times as great as they were five years ago. Not only have laboratories been largely increased, but competent instructors and caretakers have been appointed, who are daily engaged in work in them, which was not the case prior to 1902.

In addition to our own facilities we have made special arrangements with librarians in charge of the governmental and city libraries for the use of books for professors and students, and through our professors many of the government laboratories are open to graduate and professional students. These arrangements are definite and efficient, not, as they used to be, merely the privileges offered to the general public.

We have also largely increased the space occupied by the educational work. University hall has been refitted from top to bottom until every inch of space in it is now occupied and alive with workers. The court in the rear of the building has been roofed and is used as a laboratory. Seven 4-story houses have been rented and every room is now occupied. All our buildings are open and class work is going on from 8 and 9 o'clock in the morning to 6.30. Professors have their offices and can be found daily in the university. These conditions are in marked contrast with those existing in 1902. Then the class rooms were only occupied in the evening excepting for the few classes carried on by Columbian college. Few professors were found in the buildings except when holding classes. In fact the buildings were deserted through the day, and the president found it necessary to have only one regular hour per day in his office to conduct the administrative affairs.

To-day 42 professional teachers on full time are engaged in the departments of arts and sciences, medicine, law, and the college of the political sciences.

To value these advances in dollars and cents is impossible. Measured by every other test the new university of to-day is a living, healthy, strong organism commanding the respect and the sympathy of a great and growing number of educators and friends.

Because we have not a large number of buildings and a large endowment we fear the work is not appreciated by those who ought to see and know the importance of it. The following well-known institutions, with many others that might be named, have fewer students than we have (figures taken from last year's catalogues):

| | |
|---|--------|
| Amherst..... | 458 |
| Bucknell..... | 708 |
| Brown..... | 937 |
| Dartmouth..... | 998 |
| Georgetown, D. C..... | 693 |
| Johns Hopkins..... | 720 |
| Lehigh..... | 685 |
| Princeton ^a | 1, 301 |
| Tulane..... | 903 |
| University of Maine..... | 611 |
| Union University..... | 616 |
| University of Virginia..... | 728 |
| Western Reserve..... | 856 |
| Western University of Pennsylvania..... | 911 |

The following have fewer full-day students than we have:

| | |
|-------------------------------------|-----|
| Bowdoin..... | 333 |
| Clark University..... | 100 |
| Collegiate Department of Clark..... | 65 |
| Georgetown, Ky..... | 280 |
| Lafayette..... | 442 |
| Lake Forest..... | 356 |
| Randolph-Macon..... | 144 |
| Rochester University..... | 312 |
| Richmond..... | 328 |
| Rutgers..... | 411 |
| Swarthmore..... | 307 |
| University of Georgia..... | 408 |
| Washington and Lee..... | 375 |
| Washington and Jefferson..... | 375 |
| Wesleyan University..... | 338 |
| William and Mary..... | 224 |

This university is now enrolled among the number whose registration and work is noted and commented upon by educational and scientific publications.

Our graduate work has been greatly advanced and improved. We stand No. 16 among universities in the enrollment of graduate students from 1898 to 1908, and No. 12 in the list of higher degrees conferred during the last eleven years where the subjects have been in the natural and exact sciences. This graduate work is steadily growing and must in time be the crowning feature of university work in this capital city.

The public white schools of the District of Columbia have registered for this year 25,001 male and 27,738 female students, making a total of 52,739. Of this number 4,381 are in the high schools and the McKinley Manual Training School; 224 are in the normal schools, making 4,605 white students in preparatory work. It is impossible to say how many of these students will pass into colleges, technical and professional schools, but the percentage is steadily increasing, and it is a fair estimate to say that the public schools of the District will furnish 1,000 students for college, technical and professional training. When we add the number that are in private preparatory schools in the District of Columbia it will clearly appear that there is a great local demand and a large field for higher education in this city. To this local demand we must add the hundreds of men that come to Washington from all parts of the Union for higher and professional education. In view of all the facts it is fair and reasonable to say that this university, if well endowed and provided with ample laboratory facilities and buildings, would, in time, have four or five thousand students of the highest grade.

It is impossible to do educational work of university grade without the expenditure of large sums of money in addition to the amount received from tuition fees. The averages show that the students' fees in the best universities do not pay more than 50 per cent of the cost of the students' education; in many institutions the percentage paid by the students is less than 50 per cent. In our university the percentage paid by students' fees last year was 63 per cent. The total expenditure at Harvard University last year, as reported, was \$1,950,000, while the number of students was about four times the number in our own university. Our pay roll averages for the twelve months about \$11,540 per month, and the other current payments average about \$9,950 per month for the year.

^a Excluding theological seminary.

From the treasurer's report for the year ending August 31, 1908, it appears:

| | |
|--------------------------------------|----------------|
| Total expenses for year 1907-8..... | \$255, 414. 73 |
| Total receipts from all sources..... | 157, 526. 52 |

| | |
|--------------|-------------|
| Deficit..... | 97, 888. 21 |
|--------------|-------------|

This deficit was paid out of the general funds of the university, excepting the balance shown below, carried over into the present year.

The treasurer's report of the budget for the present year, 1908-9, shows the following general results:

| | |
|---|----------------|
| Total expenses on present appropriations..... | \$250, 484. 00 |
| Total income from all sources..... | 170, 452. 27 |

| | |
|--|-------------|
| Deficit in the budget, present year..... | 80, 031. 73 |
| Carried over from the previous year..... | 21, 502. 92 |

| | |
|---|--------------|
| Total amount to be provided for..... | 101, 534. 65 |
| To meet these maturing obligations the university has cash in bank and liquid assets valued at..... | 78, 622. 58 |

| | |
|---|-------------|
| Excess of current year's liabilities..... | 22, 912. 07 |
|---|-------------|

The total assets of the university, including the liquid assets above mentioned, are:

| | |
|--|-------------------|
| Real estate occupied by all departments of the university..... | \$1, 009, 599. 93 |
| Less bonded debt..... | 450, 000. 00 |

| | |
|---|--------------|
| Equity..... | 659, 599. 93 |
| Other real estate..... | 37, 518. 40 |
| Other assets, including bonds, notes, equipment, books, furniture, fixtures, etc., pledges, and cash on hand..... | 150, 831. 55 |

| | |
|-----------------------|--------------|
| Total net assets..... | 847, 949. 88 |
|-----------------------|--------------|

In addition the university holds trust funds, the income to be applied to educational work and other purposes, amounting to \$88,740.91.

It is apparent that the university can not go forward on its present policy of advanced work, with increasing numbers of students, without a provision for the annual deficit. The liquid funds of the university will be exhausted this year. The results of the policy adopted and put in force in 1905 have demonstrated that there is a large and growing demand in the city of Washington for higher education of the best quality, and that it is possible, with proper facilities, for this nonsectarian institution to carry on the work successfully if supplied with the necessary funds. The question now before us is, Shall we turn back and forsake the cause for which we have labored and sacrificed during the last few years? The promise of great success, born of educational advance over financial obstacles unprecedented in the history of any other university, is before our very eyes. The university bears the most honored name in American history, the name of a man whose character and life are revered and loved by all Americans and by peoples of every civilized race. Washington saw the need, and labored for the establishment of an institution of learning in this city. To him the motive was patriotism, and this motive may now be added to what has already been presented regarding the demand here for a university.

I can not present this thought better than to quote the words of the distinguished educator and diplomat, Dr. Andrew D. White, contained in a letter written by him to me under date of January 14, 1908. He says:

"I hope that you will bear in mind what to my way of thinking is the most important consideration in the whole matter.

"It is not that such a remarkable body of scientific men and such a mass of scientific work are already in action at Washington; nor is it that such noble libraries and laboratories and collections are already there in existence; nor is it that the place itself would attract professors and lecturers perhaps more than any other that could be named; nor is it that there are so many young men and young women drawn there by service in the various departments; all these are exceedingly weighty arguments, but all of them together are outweighed in my mind by the political argument, which was the one presented by Washington himself, namely, that at the federal city young men from North and South could be brought together for scholarly purposes in far greater numbers and to better advantage than at any other place which could be named.

"I feel deeply that more would be done to promote unity of feeling between North and South by the friendships thus promoted and by the ideas thus developed by all these young men in common than could be accomplished in any other way; and as I look to the perfect restoration, or rather to the perfect establishment of hearty good feeling between North and South as a greater desideratum than anything else in our country, this aspect of the case is to me by far the most important."

Can we meet the existing and increasing demand for a true university in Washington? Is it possible to realize the hopes for a sincere and well-ordered institution of higher learning at the capital of this rich and mighty nation? Only the wise, the patriotic, and noble-minded men of wealth can answer these questions.

Respectfully submitted.

CHARLES WILLIS NEEDHAM,
President.

EXHIBIT 5.

[Address of President Charles W. Needham at the opening of The George Washington University, September 29, 1909.]

THE UNIVERSITY AND THE DISTRICT.^a

To-day the university enters upon its eighty-ninth year, with an increased number of registered students over last year. There is something that comes out of the years that neither money nor labor can secure. Time softens the colors and adds beauty to works of art, and it gives tone and strength to institutions. Words can not define or interpret it, but every sensitive and true heart can feel it. There are some visible things that can be enumerated.

First, there are the organized faculties, with able, trained teachers, fitted into the environment, working together with a common knowledge of the existing needs and opportunities, and with definite aims to accomplish the common purpose. Such an organization is of immense value, representing the collective power and genius of men, and the cumulative force of an organization which has had a continuity of existence for a long period of time.

Next, there is the student body. Universities exist primarily for the students. A university without students is an organization without purpose or excuse for being. Every object and aim centers in the student body. An organized student body of fifteen hundred is a great possession; it is power capitalized. It takes time for an institution to secure a good body of students, for such a body of students is the result of good educational work. Many think that to establish a university requires only buildings, a faculty, advertising, and open doors. The fact is, 90 per cent of a large student body comes as the result of commendation of the work by the students themselves. If they are pleased they say so and others come. To gain a large and stable body of students is the work of time.

Again, back of the student body there are the alumni—in this institution six thousand—with their memories, associations, and attachments; their power and influence to advance the common good. The alumni are the most valuable constituency that an institution of learning can have. They are the spiritual constitution, the reserved power, the stored energy of the university.

These three factors are the visible things that come with the years, and can be acquired only by a long and honorable institutional life.

Every institution must justify its being by its service to the community in which it exists. Not what it offers to do will determine its value, but, rather, whether it meets the needs of the community it tries to serve.

During the summer it was my privilege to converse with many men regarding the demands in the District of Columbia for higher education. Most men have heretofore, I regret to say, considered this question from an outside standpoint—the needs of the country at large and not those of the District. This has led invariably to the conclusion that a university here should do only graduate work, and even that should be done within a very limited sphere. This view is true so far as the real needs of the country at large are concerned, but it does not touch the needs of this District. We have a large population, larger than some of the smaller States, and as such we are entitled to have our own peculiar and pressing needs considered in determining the character of a university to be supported here.

^a Reprint from the University Bulletin, October, 1909.

There are two large bodies of students permanently within the District demanding higher education, and both are increasing with the years. The first group appeals to every loyal resident of the District. It is composed of the young men and women who have no other residence. Their life is here and their education must be obtained here. They are the sons and daughters of army and navy officers, and men in the civil service of the United States. Many of these young people must get their college, and technical and professional training within the District or they can not obtain it at all. The District offers few opportunities to the rising generation. The desirable occupations offered in Washington are mainly governmental. These places are secured through the civil service examinations. These examinations are not open, as a rule, to residents of the District, but are reserved to the more favored residents in the States who possess the power of the ballot. The young men and young women reared within the District must, therefore, go out into the States to earn a livelihood. There they come into direct competition with young men and women who have been educated in the State and privately endowed universities. Without a college education they are rated as inferior and are seriously handicapped. If they secure simply a college education they are still at a disadvantage. Without specialization the pursuits of engineering, teaching, law, medicine, and other callings are closed to them.

Last year we had 573 students registered in this university who had no other residence than the District of Columbia. There are approximately 140,000 white people living in the District who are dependent upon salaries paid by the United States Government. A large number of these men, fathers of our young people, are college graduates, and the mothers are highly educated women. These parents are anxious that their sons and daughters should have a college education. But salaries, ranging mainly from one thousand to twenty-five hundred dollars, will hardly permit the sending of one or more of the family out of the District to secure college and professional education. The cost of sending a young man away to college will average about \$1,000 per year. This amount, where the salary is small, makes it almost impossible to give a young man or woman a complete education, especially if there be more than one in the family to be educated. This body of students, for the college and professional schools, is of unusually high grade and should, when considered with the necessities existing here, appeal strongly to all who intelligently consider the need for an institution of higher learning in this District. The material and moral well-being of our sons and daughters here demand a university that serves the District by giving sound training in collegiate, technical, and professional schools of university grade. While many from the States will come here to attend such a university, it is, after all, a District problem. The people outside will not solve it for us. Washingtonians must clearly apprehend the situation and the demands, and press strongly for an institution that meets all of these needs, one that will thoroughly educate our young people for the higher walks of life.

There is also another body of students located within the District, who must obtain their professional education here if they secure it at all. I refer to those who are employed in the departments of the Government or as secretaries to Representatives, committees, executive officers, and public men. The employment of these men is of such a nature, and their hours of employment are so well regulated, that they have at their disposal considerable free time, which they can use in perfecting their education. Many of them come here with their college course incomplete and they desire to complete it. The most of them, however, are men who have pursued their education to the point of entering professional or technical schools.

There are two motives impelling this class of students to higher education. Many do not desire to make their employment here a permanent life work, but desire to follow it during a few years of their young manhood to enable them to secure a good professional training. As soon as this is obtained they go out into the States, and enter the professions, become active in civic affairs, and if well trained, develop into the best citizens. They have felt the impulse and studied the movements of national and international life. They go back to their homes, carrying with them this influence and spirit, and many of them will become the public servants of the people. Others are fitting themselves for higher and better work in the government service. They seek advancement through the improvement of their talents. This motive has been encouraged in other nations, especially in Germany, by making it possible for the young men in the public service to take university courses in order that they may become more efficient men.

If this body of men secure any education it must necessarily be in the city of Washington. They have not time to go elsewhere. There is but one question regarding these men, and that is, shall they have as good an education here in professional and technical schools as is given to university students elsewhere? Many are men of high order, remarkably active and efficient in every way and, as noted, will become posi-

tive factors in determining future governmental policies of the several States and of the United States. These men ought to be educated in the most thorough way, especially in the political sciences and in the professions. Of this large body of students too many, it is true, seek degrees rather than thorough knowledge and intellectual discipline, but there is a large minority who sincerely desire the best education and are willing to give additional years to it. To all who have to do with university education in the District of Columbia and to the noble givers to educational enterprises, I submit this question: Is it not of the greatest importance to the future of this country that these men be given the best university training?

These two bodies of students to which I have referred, residents of the District of Columbia, and compelled to obtain their education here, are quite sufficient to maintain a true university of the highest order. I do not exaggerate when I say that such a university, properly equipped with buildings, laboratories, and other facilities, will have a student body of three or four thousand without drawing upon the clientele of any other institution of learning.

In view of these local needs of the District of Columbia, we may well ask, What are the aims and the work of the George Washington University?

1. *College of arts and sciences.*—We are maintaining a college of liberal arts. This work is fundamental to all higher education. It provides the cultural training that gives a man the control of his intellectual faculties; the history of the intellectual development of civilized men the finest ideals and the broadest views of human life. It is the college that in the highest and truest sense makes one a man of the world. It should teach something in every field of human knowledge and provide thorough education along as many lines as its resources will permit. We have gradually broadened the opportunities for students in the college by furnishing, in addition to our excellent courses in the old lines of college education, courses in the modern sciences; and we have provided teachers in these lines who are specialists in the subjects taught. With our resources it is impossible to offer as many courses as are offered in larger and better endowed colleges, but we have endeavored to place at the disposal of our students a good teacher in every field of education covered in the best colleges. With better facilities and more endowment, this university should offer more work and our teachers should not be required to teach as many hours per week as they are now required to do. It is not enough to have good teachers, but we should give to these teachers the opportunity to keep their minds fresh and active, renewing them continually through study and research work. This requires that the teacher should have some time at his disposal outside of the class-room hours and the time required to make preparation for the class. The college, with its 300 students doing excellent work, is in need of liberal endowments.

2. *College of engineering and mechanic arts.*—In this strenuous age, with few exceptions, no man can enter the desirable positions in the industrial world without special technical training. It is our aim to provide for the District of Columbia a college of engineering and mechanic arts, doing work of college grade. This field is growing larger every year, calling more urgently for trained men. It furnishes opportunities for higher employment, of which we can ill afford to deprive our young men who are compelled to go out from the District into the States to find remunerative employment. A well-equipped and endowed college of the mechanic arts is as essential in the District of Columbia as it is in any other community. We have the very best student material and nearly 200 already registered in these courses. Our facilities are inadequate, but the earnest men in our faculty are striving with all the energy and ambition possible to give these students the technical knowledge that will be helpful in making them efficient and self-supporting members of society.

3. *Division of architecture.*—Another branch of our work is the division of architecture. This is one of the finest of the fine arts, as well as one of the most useful of employments. It has been said that a people pass out of savagery when men become carpenters, and they pass into the highest civilization when carpenters become architects. The growing demand throughout the country for trained men in this line of employment offers special inducements to young men of fine quality and attainments. The opportunities for the study of architecture in the city of Washington are very great; the best examples of our colonial architecture are to be found in this vicinity. We already have 60 men in these courses, and with proper facilities and additional teachers we could soon double, and I think quadruple, that number.

4. *Teachers' college.*—In 1906 Congress passed an act for the reorganization of the public schools of the District of Columbia, in which it was provided that new appointees to positions in the high schools and normal schools should have had a college education and pass the examinations prescribed by the board of education. Among other subjects the board of education prescribed for examination were psychology and pedagogy. One of the results of this excellent legislation was to close the doors of

positions in the high school to young men and women of the District, unless this required education was furnished them here. They must secure it here if they secure it at all. Our college of liberal arts meets the first requirement, and to meet the second we began the establishment of a teachers' college, putting in courses in the required subjects of psychology and pedagogy. This work is not as extensive as it should be, but it is thorough and excellent and provides for our young people the education which is required by the statute and it will enable them to secure and more ably perform the duties of teachers in the high schools. The work in the teachers' college is based upon two years of college work; the technical courses coming in the third and fourth years, leading to a bachelor's degree and a teacher's diploma.

5. *Political sciences.*—Of the large body of students here there are many who desire to take special work in the political sciences, fitting themselves the better for service in all branches of government. This body of students includes those who hope to become legislators and executives in the States, and those who would enter the home and foreign service of the nation. Here, where the great functions of government are being exercised daily, where the influence of these activities is felt and where the data that need to be studied are found in their original sources, the student has an opportunity to study the political sciences not equaled in any other place in the United States. We, therefore, have established the college of the political sciences, with a two-year undergraduate course; requiring for admission two years of college work. This enables those who are pursuing an undergraduate course to put the emphasis of their work in the third and fourth years upon the political sciences. This college also offers two years of graduate work to those who have a bachelor's degree. In this college we have gathered a few well-equipped and most earnest teachers; they have come to us from the best institutions of learning in the country, after pursuing specialized graduate courses, having also had experience as teachers. This work has received some generous contributions and has already accumulated a very good working library. What we need is its permanent endowment to an extent that will enable us to enlarge the faculty and increase the number of courses offered in order to meet the growing demand for this education at the national capital.

This completes the circle of the undergraduate work which the George Washington University is now doing and in which it has registered over 600 students.

6. *The faculty of graduate studies.*—There is one field of education about which all agree. Those outside as well as those within the District unite in saying that this capital city has unusual facilities for the pursuit of graduate study. The research student finds here rich stores of original matter that can not be found in any other city. Our libraries and museums and other storehouses of knowledge in many of the departments of the Government are a constant and drawing attraction to the scholars of our own and other lands. No university is complete without its faculty of graduate studies. This department of our work is steadily growing, both in numbers and in its reputation for good work. In the faculty there are men of national reputation doing noble work in the sciences, and many of them are on the outposts discovering new knowledge. Last year we had over 100 in this division of our work, and the registration at the present time gives promise that this year we shall have an equal number. No division of educational work appeals more widely or more strongly to people of the whole country for maintenance and generous support than does this work of the graduate faculty.

7. *The law school.*—The Speaker of the House of Representatives, in a public address, stated that during his public life he had brought to Washington over 30 young men who had taken courses in law in this university. Other public men have been doing likewise. The university authorities some time ago felt impelled to provide for the District of Columbia a law school that should be equal to the best schools in the country. A policy was therefore adopted gradually to recast and improve this work. The courses were enlarged, the standards of admission raised, trained teachers employed giving their whole time to the work, and new methods of instruction, which required much more work from the students, were adopted. Recognizing the difference in the two groups of students to which I have referred, we now have a three-year course of fourteen hours per week, leading to the bachelor of laws degree for full-day students. For those employed part of the day, we require four years of work, with ten or eleven hours per week, aggregating forty-two hours in four years, for the bachelor of laws degree. By thus limiting the class-room hours, the students giving only a part of their time are enabled to make the full preparation required for their class hours, and the standard of the work and the value of the degree are upheld. This policy was adopted two years ago, and it is worthy of note that at the last meeting of the Association of American Law Schools, composed of 38 of the best law schools in the country, a like provision was adopted as a requirement for all its members granting the bachelor of laws degree. We are steadily growing toward the ideal which we

have set before us, and while the number of students in this school was reduced by these higher requirements, a new growth has begun that will carry us beyond the registration of former years, under the old method of didactic lectures. There is a sound body of students here who want the best education in law, and the number is sufficient to maintain a school of the first order in the District of Columbia.

8. *The medical school.*—We have also created a new ideal for the medical school and are upon the way toward realizing it. Didactic lectures have been largely supplanted by the laboratory and clinical methods. The adoption of these methods requires the student to give his days to the work, and we are, therefore, registering only full-day students at the present time. Thoroughly trained scientific teachers have been employed for the laboratory courses, and the professors in medicine and in surgery have adopted the clinical method of teaching. The standards of admission and work have been raised, and while this advance has, as in other departments, reduced the number of registered students, we believe that in the long run the university will greatly benefit by the higher efficiency and professional standing of its graduates in medicine.

In connection with this work we have a dental department, a college of pharmacy, and a college of veterinary medicine, the last two colleges being upon independent financial foundations and management, but affiliated with the university. These colleges are offering to the young men of the District excellent education in these lines and are fitting them for employments which offer many desirable positions.

I might dwell longer upon these branches of our work. I desire simply to present them as showing the sincere effort of the George Washington University to meet the real demands in the District of Columbia for collegiate and technical and professional education of university grade and to show that we are trying to serve this community and furnish to the hundreds of young men and young women in the District opportunities for education which will put them above the ordinary employments into those fields of human endeavor which are giving to America to-day its best civilization.

EXHIBIT 6.

Estimate of receipts and expenditures for the fiscal year ending August 31, 1910.

RECEIPTS.

From students:

| | | |
|-----------------------------------|------------|--------------|
| Graduate studies..... | \$6,000.00 | |
| College of arts and sciences..... | 18,550.00 | |
| College of engineering..... | 16,180.00 | |
| Architecture..... | 3,550.00 | |
| Political sciences..... | 5,450.00 | |
| Teachers' college..... | 4,020.00 | |
| Medicine..... | 18,250.00 | |
| Dentistry..... | 3,700.00 | |
| Law..... | 26,000.00 | |
| | | \$101,700.00 |

From endowments:

| | | |
|-----------------------------|----------|----------|
| Powell (net)..... | 1,600.00 | |
| Investment A..... | 1,041.00 | |
| Ordronaux..... | 200.00 | |
| Cooper..... | 450.00 | |
| National Park Seminary..... | 20.00 | |
| | | 3,311.00 |

From Corcoran fund.....

640.00

From contributions:

| | | |
|-----------------------------|----------|----------|
| For prizes..... | 50.00 | |
| For political sciences..... | 6,600.00 | |
| For school at Athens..... | 200.00 | |
| | | 6,850.00 |

From dormitories.....

2,500.00

From miscellaneous:

| | | |
|--|--------|----------|
| Halls..... | 500.00 | |
| National College of Veterinary Medicine: | | |
| For matriculations..... | 175.00 | |
| For teaching..... | 500.00 | |
| Dental infirmary..... | 400.00 | |
| Sale of stationery..... | 405.00 | |
| | | 1,980.00 |

From University hospital:

| | | |
|-----------------------------|-------------|-------------|
| Pay patients..... | \$37,980.00 | |
| Board of lady managers..... | 2,000.00 | |
| Board of Charities..... | 3,000.00 | |
| | | <hr/> |
| | | \$42,980.00 |
| | | <hr/> |
| | | 159,961.00 |

EXPENDITURES.

Educational.

Salaries of the teaching staff:

| | | |
|-------------------------|------------|-----------|
| Graduate studies..... | \$4,280.00 | |
| Arts and sciences..... | 21,000.00 | |
| Engineering..... | 9,950.00 | |
| Architecture..... | 3,180.00 | |
| Political sciences..... | 11,660.00 | |
| Teachers' college..... | 4,800.00 | |
| Medicine..... | 7,805.00 | |
| Dentistry..... | 2,850.00 | |
| Law..... | 22,525.00 | |
| | | <hr/> |
| | | 88,050.00 |

Fellowships and scholarships:

| | | |
|--------------------------------------|------------|----------|
| Fellowships..... | 1,000.00 | |
| Scholarships on foundations..... | \$1,000.00 | |
| Scholarships not on foundations..... | 200.00 | |
| | | <hr/> |
| | | 1,200.00 |

Libraries:

| | | | |
|------------------------|----------|----------|--|
| Salaries— | | | |
| Arts and sciences..... | 1,880.00 | | |
| Teachers' college..... | 50.00 | | |
| Medicine..... | 150.00 | | |
| Law..... | 620.00 | | |
| | | <hr/> | |
| | | 2,700.00 | |
| Books— | | | |
| Arts and sciences..... | 800.00 | | |
| Medicine..... | 500.00 | | |
| Law..... | 500.00 | | |
| | | <hr/> | |
| | | 1,800.00 | |

Laboratories:

| | | |
|--|----------|----------|
| Chemistry (arts and sciences)..... | 1,000.00 | |
| Mineralogy (arts and sciences)..... | 100.00 | |
| Biology (arts and sciences)..... | 100.00 | |
| Physics (arts and sciences)..... | 300.00 | |
| Psychology (teachers)..... | 150.00 | |
| Electrical engineering (engineering)..... | 300.00 | |
| Mechanical engineering (engineering)..... | 300.00 | |
| Civil engineering (engineering)..... | 300.00 | |
| Anatomy (medicine)..... | 400.00 | |
| Bacteriology and pathology (medicine)..... | 500.00 | |
| Chemistry (medicine)..... | 200.00 | |
| Physiology (medicine)..... | 500.00 | |
| Histology (medicine)..... | 100.00 | |
| Dental infirmary (dentistry)..... | 400.00 | |
| | | <hr/> |
| | | 4,650.00 |

Convocations and commencement expenses.....

Dormitories:

| | |
|--|----------|
| Table supplies, domestic and household expenses..... | 3,000.00 |
|--|----------|

Prizes:

| | |
|-------------------------|----------|
| On foundations..... | \$285.00 |
| Not on foundations..... | 265.00 |
| | <hr/> |
| | 550.00 |

Furniture and fixtures.....

University hospital:

| | | |
|------------------------------------|---|-----------|
| Salaries..... | } | 44,700.00 |
| Medical and surgical supplies..... | | |
| Equipment..... | | |
| Table supplies..... | | |
| House expenses..... | | |

Maintenance of buildings:

University Hall—

| | | |
|---------------------|------------|------------|
| Wages..... | \$1,477.50 | |
| Fuel..... | 1,200.00 | |
| Electric light..... | 900.00 | |
| Gas..... | 350.00 | |
| Repairs..... | 500.00 | |
| Sundries..... | 300.00 | |
| | | <hr/> |
| | | \$4,727.50 |

Law Hall—

| | | |
|---------------------|--------|--------|
| Wages..... | 285.00 | |
| Fuel..... | 20.00 | |
| Electric light..... | 450.00 | |
| Gas..... | | |
| Repairs..... | 50.00 | |
| Sundries..... | 100.00 | |
| | | <hr/> |
| | | 905.00 |

Medical hall:

| | | |
|---------------------|----------|----------|
| Wages..... | 1,290.00 | |
| Fuel..... | 2,000.00 | |
| Electric light..... | 1,200.00 | |
| Gas..... | 200.00 | |
| Repairs..... | 300.00 | |
| Sundries..... | 300.00 | |
| | | <hr/> |
| | | 5,290.00 |

University Annex:

| | | |
|---------------------|----------|-------|
| Wages..... | 915.00 | |
| Fuel..... | 750.00 | |
| Electric light..... | 240.00 | |
| Gas..... | 320.00 | |
| Repairs..... | 100.00 | |
| Rent..... | 2,400.00 | |
| Sundries..... | 100.00 | |
| | | <hr/> |

\$4,825.00

Political sciences hall:

| | | |
|-------------|----------|----------|
| Wages..... | 225.00 | |
| Fuel..... | 125.00 | |
| Lights..... | 125.00 | |
| Rent..... | 1,800.00 | |
| | | <hr/> |
| | | 2,275.00 |

18,022.50

| | |
|---|----------|
| Advertising..... | 1,000.00 |
| Printing (including catalogue and bulletins)..... | 2,525.00 |

| | |
|------------------------|------------|
| Total educational..... | 171,197.50 |
|------------------------|------------|

Administration.

| | |
|---|-------------|
| Salaries of officers of the university (president, secretary, treasurer, and auditor)..... | \$10,750.00 |
| Salaries of stenographers, clerks, and bookkeepers..... | 5,245.00 |
| Stationery and supplies..... | 700.00 |
| Postage..... | 830.00 |
| Taxes on property not used for education..... | 500.00 |
| Telephones..... | 700.00 |
| Contribution to school at Athens..... | 200.00 |
| Contribution to athletic association..... | 450.00 |
| Rental of athletic field..... | 300.00 |
| Traveling expenses..... | 1,000.00 |
| Miscellaneous: | |
| Janitors' supplies, insurance, debaters' expenses, freights and expressage, surety bonds, towel service, repair materials, safe deposit box, etc..... | 1,950.00 |
| | <hr/> |

| | |
|---------------------------|-----------|
| Total administration..... | 22,625.00 |
|---------------------------|-----------|

Interest on debt.

| | |
|---|---------------|
| Interest on bonded and floating debt..... | \$21, 591. 66 |
| Total expenditures..... | 215, 414. 16 |

RECAPITULATION.

| | |
|--|----------------|
| Total receipts (p. 13)..... | \$159, 961. 00 |
| Total expenditures: | |
| Educational (p. 15)..... | \$171, 197. 50 |
| Administration (p. 16)..... | 22, 625. 00 |
| Interest (p. 17)..... | 21, 591. 66 |
| | 215, 414. 16 |
| Total deficit..... | 55, 453. 16 |
| Deducting the item of interest..... | 21, 591. 66 |
| Leaves deficit for education and administration..... | 33, 861. 50 |

The total expenditures for the year 1908-9 were \$249,278.04. The budget for 1909-10 fixes the expenditures at \$215,414.16, a reduction of \$33,868.88 in expenditures over last year.

In determining the budget of the present year the board of trustees, in order to be conservative, estimated the income of the present year at \$15,676.98 below that of last year. The registration of students at the date of this publication warrants the belief that the income of the present year will equal that of last year.

EQUIPMENT OF THE GEORGE WASHINGTON UNIVERSITY.

[Table of contents of the schedule attached.]

Laboratories.

EXHIBIT A.

| | |
|-------------------------------------|---------------|
| Engineering and mechanic arts: | |
| Physical..... | \$4, 509. 50 |
| Electrical..... | 4, 786. 28 |
| Drafting and civil engineering..... | 1, 788. 00 |
| Mechanical engineering..... | 7, 438. 45 |
| | \$18, 522. 23 |

EXHIBIT B.

| | |
|--------------------|---------|
| Architecture: | |
| Drawing rooms..... | 197. 00 |

EXHIBIT C.

| | |
|--|------------|
| College of veterinary medicine: ^a | |
| General equipment..... | 1, 165. 00 |
| Dissecting room..... | 228. 00 |
| Veterinary surgery..... | 790. 00 |
| Canine surgery..... | 115. 00 |
| | 2, 298. 00 |

EXHIBIT D.

| | |
|-----------------------------------|------------|
| College of pharmacy: ^a | |
| Chemical..... | 2, 353. 12 |
| Pharmacy..... | 4, 628. 41 |
| | 6, 981. 53 |

^a This college is organized under the charter of the university, with a separate board of trustees, and owns its own equipment.

The following equipment is in other departments of the university in subjects taken by students of agriculture and the mechanic arts:

EXHIBIT E.

| | | |
|--|-------------|---------------|
| Arts and sciences: | | |
| Biological, zoological, and botanical..... | \$625. 00 | |
| Geological..... | 1, 107. 00 | |
| Chemical..... | 11, 940. 46 | |
| | <hr/> | \$13, 672. 46 |

EXHIBIT F.

| | | |
|--------------------|--|---------|
| Teachers' college: | | |
| Psychological..... | | 168. 09 |

EXHIBIT G.

| | | |
|---------------------------------------|------------|-------------|
| Medical department: | | |
| Anatomical..... | 3, 429. 25 | |
| Histological..... | 3, 307. 61 | |
| Chemical..... | 3, 484. 57 | |
| Electro-therapeutic..... | 730. 00 | |
| Physiological..... | 3, 186. 88 | |
| Bacteriological and pathological..... | 7, 101. 42 | |
| | <hr/> | 21, 239. 73 |

EXHIBIT H.

| | | |
|--------------------------|--|------------|
| Dental department: | | |
| Infirmiry equipment..... | | 1, 760. 00 |

Libraries.

EXHIBIT I.

| | |
|---|-------------|
| Arts and sciences, law, medical, college of the political sciences, teachers', engineering, 45,064 volumes and pamphlets..... | 37, 000. 00 |
|---|-------------|

General equipment.

EXHIBIT J.

| | |
|---|--------------|
| Furniture and equipment used in administration and teaching..... | 17, 541. 50 |
| Total value of laboratory equipment, laboratory supplies, apparatus and furniture used by the teaching staff in the educational work..... | 119, 380. 54 |

NOTE.—These schedules do not include furniture, fixtures, and equipment in the woman's building, the hospital, and the nurses' home, not used directly in teaching.

EXHIBIT K.

Actual class enrollment for the past three years in each subject taught in the departments of engineering, architecture, veterinary medicine, and pharmacy.

EXHIBIT L.

Class enrollment in other subjects under the Morrill acts (see circular letter of the Department of the Interior, Department of Education, November 26, 1900) taken by students in agriculture and the mechanic arts not included in Exhibit K. Some of the students in these subjects are in the college of liberal arts.

EXHIBIT M.

| | |
|---|----------|
| Salaries paid the individual professors in the department of engineering and mechanic arts..... | \$9, 600 |
|---|----------|

EXHIBIT N.

| | |
|---|--------|
| Salaries paid the individual professors in the division of architecture.... | 2, 392 |
|---|--------|

EXHIBIT O.

| | |
|--|--------------|
| Salaries paid the individual professors in the college of veterinary medicine..... | Net surplus. |
|--|--------------|

EXHIBIT P.

| | |
|---|----------|
| Salaries paid the individual professors in the college of pharmacy..... | \$2, 625 |
|---|----------|

SALARIES OF TEACHERS IN OTHER DEPARTMENTS OF THE UNIVERSITY IN SUBJECTS
TAKEN BY STUDENTS OF AGRICULTURE OR THE MECHANIC ARTS.

EXHIBIT Q.

| | |
|---|-----------|
| Salaries paid the individual professors in the department of arts and sciences..... | \$20, 870 |
|---|-----------|

EXHIBIT R.

| | |
|---|---------|
| Salaries paid the individual professors in the college of the political sciences..... | 11, 660 |
|---|---------|

EXHIBIT S.

| | |
|---|--------|
| Salaries paid the individual professors in teachers' college..... | 4, 800 |
|---|--------|

EXHIBIT T.

| | |
|--|--------|
| Salaries paid the individual professors in the department of medicine... | 7, 605 |
|--|--------|

EXHIBIT U.

| | |
|---|--------|
| Salaries paid the individual professors in the department of dentistry... | 2, 895 |
|---|--------|

EXHIBIT V.

| | |
|--|--------|
| Salaries paid the individual professors in the department of graduate studies..... | 4, 280 |
|--|--------|

EXHIBIT W.

| | |
|--|--------|
| Salaries paid the librarian and assistants in the university and departmental libraries..... | 2, 870 |
|--|--------|

| | |
|------------|---------|
| Total..... | 69, 597 |
|------------|---------|

EXHIBIT X.

Charges made students for laboratory fees in the departments of engineering, architecture, veterinary medicine, and pharmacy.

EXHIBIT A.

BUILDINGS AND ROOMS FOR THE COLLEGE OF ENGINEERING AND MECHANIC ARTS.

This college uses two buildings, 1528 and 1530 I street, each 20 by 55 feet, four stories high, with basement and attic. Its classes in physics, chemistry, electricity, geology, English, French, German, and some of its classes in mathematics meet in rooms in the main building, corner of H and Fifteenth streets. Its laboratories for physics, chemistry, and electricity, its dynamo, gas engine and steam engine laboratories, and its room for shopwork are also in the main building, H and Fifteenth streets. Its cement laboratory and its drawing-rooms are at 1528 and 1530 I street.

Openings between the two buildings on I street have been made in the basement, the first floor, and the third floor. These buildings contain the following rooms:

Basement: Cement-testing rooms; students indoor rifle range.

First floor: Offices of the dean and of three instructors; students' social room; one recitation room.

Second floor: Library, three recitation rooms.

Third floor: Instructor's office; four drafting rooms.

Fourth floor: One drafting room; wireless telegraph and telephone room; instructor's room; three rooms not now in use.

In addition the buildings contain suitable toilet and cloak rooms, and instrument and locker closets.

Each recitation room contains about 380 square feet of floor area, and is provided with suitable blackboards, and will accommodate 40 students at one time.

The drawing-rooms have a total floor area of about 1,550 square feet.

When occasion calls for it, the present unused rooms will be used and will provide additional class rooms and drawing-rooms.

During the session of 1909-10 the rooms have been used as follows:

Class room No. 1.

Mathematics 9, three hours (first term), 25 students.

Mathematics 11, three hours (second term), 23 students.

Mathematics 20, three hours, 36 students.

Mathematics 21, three hours, 18 students.

Mathematics 41, two hours, 4 students.

Civil engineering 3, one hour (second term), 5 students.

Civil engineering 4, two hours, 9 students.

Civil engineering 20, two hours, 6 students.

Civil engineering 23, three hours, 4 students.

Civil engineering 24, three hours, 6 students.

Applied mathematics 21, four hours, 6 students.

Class room No. 2.

Applied mathematics 20, four hours (first term), 24 students.

Applied mathematics 22, four hours (second term), 19 students.

Civil engineering 21, two hours, 5 students.

Civil engineering 22, three hours, 13 students.

Class room No. 3.

Civil engineering 1, two hours, 25 students.

Civil engineering 2, two hours, 3 students.

Civil engineering 11, two hours (first term), 11 students.

Graphics 8 I, two hours, 11 students.

Graphics 8 II, two hours, 22 students.

Class room No. 4.

Electrical engineering 6, two hours (second term), 10 students.

Electrical engineering 7, three hours, 4 students.

Electrical engineering 22, two hours, 2 students.

Electrical engineering 23, two hours, 6 students.

Electrical engineering 26, 27, two hours, 5 students.

Mechanical engineering 1, two hours, 15 students.

Mechanical engineering 20, three hours, 12 students.

Drawing rooms: As at present arranged the drawing rooms accommodate 46 students at one time.

During the present session the following students have worked in the drawing rooms:

Graphics 1, six hours a week, three sections, 49 students.

Graphics 2, six hours a week, three sections, 13 students.

Graphics 8, two hours a week, two sections, 33 students.

Graphics 10, two hours a week, two sections, 14 students.

Civil engineering 20, four hours, 6 students.

Civil engineering 21, two hours, 5 students.

Civil engineering 22, four hours, 13 students.

Civil engineering 23, four hours, 4 students.

Civil engineering 24, two hours, 6 students.

Mechanical engineering 1, two hours, 15 students.

Mechanical engineering 7, two hours, 1 student.

The drawing rooms are open from 9 a. m to 10 p. m. Students are required to be present at specified times, when instructors are present to supervise and instruct, but are allowed to work at other hours also. The large classes are divided into sections, and with increased attendance, additional sections could be formed. This would enable us to provide for about four times the present number of students.

Cement laboratory: This laboratory has had 9 students this year, and can accommodate 10 at one time. A total of 30 students could be provided for in this laboratory.

Wireless telegraph and telephone rooms: Three hundred and sixty square feet. These have been used by instructors and advanced students for research and test.

ROOMS IN THE MAIN BUILDING, CORNER FIFTEENTH AND H STREETS, USED FOR ENGINEERING CLASSES.

Room 1: Dynamo laboratory, 600 square feet floor area.

Room 2: Lecture room, used also by laboratory students in physics and electrical measurements. It has 1,000 square feet of floor area, and will seat 100 persons.

Room 2a: Laboratory room for physics and electrical measurements, used also as a class room when necessary; 250 square feet.

Standardizing room: Sixty square feet.

Gas-engine laboratory: Four hundred and eighty square feet.

Mechanical laboratory and shops: One thousand five hundred and fifty square feet.

Lecture room 2 has been used during 1909-10 as follows:

Physics 1, three hours a week, 61 students.

Physics 3, three hours a week, 11 students.

Electrical engineering 1, three hours (first term), 7 students.

Electrical engineering 2, three hours (second term), 9 students.

Electrical engineering 21, three hours, 3 students.

Room 2a has been used by electrical engineering 21, one hour, 3 students; electrical engineering 3, two hours (first term), 3 students.

Rooms 2, 2a, and 3 have been used by laboratory students as follows:

Physics 2, first section, four hours, 16 students.

Physics 2, second section, four hours, 32 students.

Electrical engineering 4, six hours (first term), 7 students.

Dynamo laboratory has been used as follows:

Electrical engineering 5, six hours, 7 students.

Electrical engineering 24, six hours, 3 students.

Gas-engine laboratory and mechanical-engineering laboratory and shops have been used as follows:

Mechanical engineering 9, six hours (second term), 3 students.

Mechanical engineering 10, six hours, 3 students.

Mechanical engineering 22, 25, two hours, 5 students.

Mechanical engineering 4, four hours, 4 students.

Mechanical engineering 5, six hours, 3 students.

STUDENTS WHO CAN BE PROVIDED FOR IN THESE LABORATORIES.

The equipment and room provided will permit of sections of the following sizes:

Physics 2, 30 students.

Electrical engineering 4, 20 students.

Electrical engineering 5, 8 students.

Electrical engineering 24, 8 students.

Mechanical engineering 4, 8 students.

Mechanical engineering 5, ———.

Mechanical engineering 9 and 10, 18 students.

By grouping students in a number of sections it would be possible to provide for from four to six times as many laboratory students as were registered this year.

All engineering students are required to take courses in general chemistry, in qualitative analysis, and in metallurgy. The equipment and facilities for this work are described under the report from the professor of chemistry in the college of arts.

The following have been registrations of engineering students in courses not previously listed in detail in this report:

English 1, three hours a week, 14 students.

English 2, three hours a week, 27 students.

Chemistry 1, three hours a week, 30 students.

Chemistry 7, six hours a week, 28 students.

Chemistry 6, one hour a week, 24 students.

French, three hours a week, 40 students.

German, three hours a week, 24 students.

Business law, three hours a week (second term), 4 students.

Mathematics, three hours a week, 43 students.

Geology, one hour a week, 12 students.

During the session of 1909-10 the engineering students have taken courses in subjects as follows:

| | Students. |
|-----------------------------|-----------|
| Applied mathematics..... | 24 |
| Chemistry..... | 58 |
| Civil engineering..... | 51 |
| Electrical engineering..... | 29 |
| French..... | 40 |
| Geology..... | 12 |
| German..... | 24 |
| Graphics..... | 85 |
| Mathematics..... | 113 |
| Mechanical engineering..... | 31 |
| Physics..... | 49 |
| Other subjects..... | 12 |

Except in lecture courses, it is inadvisable to have classes of more than from 30 to 40 students, but of course large numbers of students can be provided for by forming additional sections. At the present time there are two or more sections in all courses taken by engineering students in mathematics, drawing, descriptive geometry, English, French, and German, and in laboratory physics and chemistry.

A study of the rooms that can be used by engineering classes and the equipment and rooms for drawing and laboratory work shows that by the formation of additional sections it would be possible to provide for from 500 to 600 engineering students. The total registration of engineering students for the session of 1909-10 has been 180.

INVENTORY.

LABORATORY AND LECTURE APPARATUS FOR PHYSICS AND ELECTRICITY.

| | |
|----------------------------|--------|
| 24 meter rules..... | \$7.20 |
| 11 spring balances..... | 15.40 |
| 5 spring balances..... | 3.00 |
| 2 springs..... | 1.00 |
| 2 platform scales..... | 11.00 |
| 4 small balances..... | 5.00 |
| 3 jolly balances..... | 24.00 |
| 1 jolly balance..... | 3.00 |
| 1 chemical balance..... | 70.00 |
| 1 chemical balance..... | 40.00 |
| 1 chemical balance..... | 25.00 |
| 2 chemical balances..... | 20.00 |
| 1 chemical balance..... | 5.00 |
| 3 sets weights..... | 6.00 |
| 4 sets weights..... | 16.00 |
| 2 sets weights..... | 6.00 |
| 2 sets weights..... | 4.00 |
| 2 sets weights..... | 3.50 |
| 2 sets weights..... | 1.50 |
| 5 sets weights..... | 2.00 |
| 2 nests iron weights..... | 2.00 |
| 30 iron weights..... | 12.00 |
| 12 brass weights..... | 2.40 |
| 2 micrometer screws..... | 6.00 |
| 3 universal pulleys..... | 4.20 |
| 4 Vernier calipers..... | 8.00 |
| 1 Vernier caliper..... | 1.50 |
| 3 micrometer calipers..... | 8.40 |
| 1 spherometer..... | 6.00 |
| 5 spherometers..... | 17.50 |
| 1 Vernier protractor..... | 15.00 |
| 1 wire gauge..... | 2.50 |
| 2 25-meter tapes..... | 2.50 |
| 4 torsion apparatus..... | 42.00 |

| | |
|---|----------|
| 1 torsion apparatus..... | \$10. 00 |
| 1 comparator, with 2 microscopes..... | 50. 00 |
| 2 rods for above..... | 7. 00 |
| 1 Kater pendulum..... | 3. 75 |
| 1 beam compass..... | 3. 00 |
| 3 Archimedes principle apparatus..... | 4. 00 |
| 2 Hicks impact apparatus..... | 10. 00 |
| 1 impact apparatus..... | 3. 00 |
| 2 parallelogram of force apparatus..... | 10. 00 |
| 1 parallelogram of force apparatus..... | 4. 00 |
| 3 Youngs modulus apparatus..... | 57. 00 |
| 3 force tables..... | 81. 00 |
| 3 acceleration apparatus..... | 120. 00 |
| 2 Boyle's law apparatus..... | 76. 00 |
| 1 air-pressure apparatus..... | 4. 00 |
| 1 law of motion apparatus..... | 2. 00 |
| 4 spirit levels..... | 1. 00 |
| 1 spirit level..... | .70 |
| 1 set center of gravity apparatus..... | 5. 00 |
| 1 Atwood's machine..... | 15. 00 |
| 1 dividing engine..... | 10. 00 |
| 1 breaking strength apparatus..... | 5. 00 |
| 12 retort stands..... | 20. 00 |
| 3 tube stands..... | 3. 00 |
| 6 specific-gravity bottles..... | 2. 10 |
| 3 balancing column apparatus..... | 3. 00 |
| 1 aneroid barometer..... | 5. 00 |
| 1 siphon barometer..... | 3. 50 |
| 4 fountain in vacuo..... | 8. 00 |
| 1 Barlow's mill..... | 2. 00 |
| 8 hydrometer jars..... | 5. 00 |
| 2 hydrometers..... | 1. 50 |
| 2 Nicholson's hydrometers..... | 2. 50 |
| 1 set of capillary tubes and stand..... | .75 |
| 1 rotating apparatus and accessories..... | 12. 00 |
| 2 rotating apparatus..... | 10. 00 |
| 2 sets equilibrium tubes..... | 3. 50 |
| 1 pressure apparatus..... | 1. 00 |
| 6 pump models..... | 15. 00 |
| 1 air pump..... | 20. 00 |
| 1 Geryk air pump..... | 50. 00 |
| 1 Queen air pump..... | 100. 00 |
| 2 hand air pumps..... | 9. 00 |
| 2 sets demonstration pulleys..... | 4. 00 |
| 3 gyroscopes..... | 10. 00 |
| 7 bell jars..... | 11. 00 |
| 1 pressure of liquids apparatus..... | 6. 00 |
| 2 mercury shower apparatus..... | 1. 50 |
| 2 compressed-air vessels..... | 5. 00 |
| 1 aspirator..... | 2. 00 |
| 1 seven-in-one apparatus..... | 7. 00 |
| 1 globe with stop cock..... | 5. 00 |
| 1 baroscope..... | 6. 00 |
| 1 Magdelburg hemispheres..... | 8. 00 |
| 2 vacuum lift cylinders..... | 8. 00 |
| 1 gas meter..... | 25. 00 |
| 1 guinea and feather tube..... | 5. 00 |
| 1 maximum density of water apparatus..... | 4. 00 |
| 1 electric tuning fork..... | 13. 50 |
| 32 tuning forks..... | 36. 00 |
| 1 set conical resonators..... | 7. 00 |
| 1 organ pipe..... | 4. 00 |
| 1 organ pipe..... | 3. 50 |
| 1 organ pipe..... | 1. 50 |
| 3 resonance tubes..... | 16. 50 |
| 3 resonance tubes..... | 9. 00 |
| 1 bell and resonators..... | 3. 00 |

| | |
|--|--------|
| 3 Kundt's apparatus..... | \$6.00 |
| 1 set Quincke's tubes..... | 2.00 |
| 1 sensitive flame..... | 2.00 |
| 1 gramophone..... | 15.00 |
| 1 graphophone..... | 15.00 |
| 1 graphophone, electric driven, with table (loan)..... | 75.00 |
| 1 graphophone, cylinder shaver (loan)..... | 25.00 |
| 1 set Chladni plates, brass..... | 3.00 |
| 1 set Chladni plates, glass..... | 1.40 |
| 1 interference tube..... | 1.00 |
| 1 interference tube..... | 4.00 |
| 1 spiral brass spring..... | 1.50 |
| 1 set tin tubes..... | 2.00 |
| 1 rose burner..... | .75 |
| 1 bell in vacuo..... | 2.50 |
| 4 sonometers..... | 20.00 |
| 2 sonometers..... | 6.00 |
| 1 siren..... | 7.00 |
| 1 wind chest..... | 7.00 |
| 1 tuning-fork apparatus..... | 12.00 |
| 1 manometric flame apparatus..... | 5.00 |
| 1 manometric flame apparatus..... | 1.00 |
| 1 Trevelyan rocker..... | 3.00 |
| 3 stop watches..... | 21.00 |
| 1 brass bow..... | 1.00 |
| 2 heat-expansion apparatus..... | 2.00 |
| 6 linear expansion apparatus..... | 21.00 |
| 2 ball and ring..... | 2.00 |
| 1 cryophorus..... | 1.50 |
| 2 compound bars..... | 1.50 |
| 4 parabolic reflectors..... | 6.00 |
| 1 studentia calorimeter..... | 25.00 |
| 1 calorimeter..... | 5.00 |
| 2 calorimeters..... | 20.00 |
| 14 calorimeter cups..... | 5.60 |
| 1 drying oven..... | 6.00 |
| 14 Bunsen burners..... | 3.50 |
| 14 thermometers..... | 8.40 |
| 4 air thermometers..... | 5.00 |
| 2 air thermometers..... | 10.00 |
| 1 differential thermometer..... | 3.00 |
| 1 hygrodeik..... | 5.00 |
| 6 hypsometers..... | 12.00 |
| 2 Leslie cubes..... | 3.00 |
| 1 radiometer..... | 5.00 |
| 1 steam heater..... | 12.00 |
| 1 Mousson apparatus..... | 8.00 |
| 2 ice molds..... | 3.00 |
| 4 spectrometers..... | 152.00 |
| 1 spectrometer..... | 50.00 |
| 1 spectrometer..... | 40.00 |
| 6 reading glasses..... | 4.50 |
| 1 lens and stand..... | 5.00 |
| 1 concave mirror and stand..... | 5.00 |
| 1 polariscope..... | 7.00 |
| 18 Iceland spar crystals..... | 7.00 |
| 2 quarter-wave plates..... | 4.00 |
| 16 selenite films..... | 11.00 |
| 6 quartz plates..... | 7.50 |
| 2 quartz prisms..... | 11.00 |
| 2 Iceland spar prisms..... | 11.00 |
| 1 Rochon prism..... | 7.00 |
| 1 Wollaston prism..... | 7.00 |
| 1 Foucault prism..... | 12.50 |
| 1 Fresnel biprism..... | 5.00 |
| 4 prism bottles..... | 10.00 |
| 1 Porter thick lens..... | 4.00 |

| | |
|--|---------|
| 1 Porter rotating image lens..... | \$2. 00 |
| 1 cyanine prism..... | 4. 00 |
| 1 simplex spectroscope..... | 5. 00 |
| 2 chromatic disks..... | 5. 00 |
| 1 zone plate..... | 1. 50 |
| 1 uranium nitrate cell..... | 1. 00 |
| 5 diffraction gratings..... | 25. 00 |
| 1 circular diffraction grating..... | 3. 00 |
| 12 prisms..... | 6. 00 |
| 1 Newton's rings..... | 3. 00 |
| 8 lenses..... | 6. 00 |
| 1 reading microscope..... | 6. 00 |
| 1 Bunsen photometer..... | 4. 00 |
| 1 telescope eyepiece..... | 25. 00 |
| 1 color-mixing slide..... | 5. 00 |
| 1 tourmaline tongs..... | 2. 50 |
| 4 concave and convex mirrors..... | 8. 00 |
| 2 cylindrical mirrors..... | 1. 00 |
| 1 cylindrical mirror..... | 3. 00 |
| 1 sextant..... | 5. 00 |
| 1 diffraction apparatus..... | 25. 00 |
| 1 mirror illusion..... | 2. 00 |
| 1 reflection and refraction apparatus..... | 20. 00 |
| 1 optical disk and accessories..... | 30. 00 |
| 1 rotating mirror..... | 5. 00 |
| 1 Michelson interferometer..... | 140. 00 |
| 1 sodium-flame apparatus..... | 7. 00 |
| 1 kinetoscope..... | 2. 50 |
| 1 stroboscope..... | 5. 00 |
| 1 photometer..... | 9. 00 |
| 1 optical bench and accessories..... | 35. 00 |
| 3 optical benches and accessories..... | 90. 00 |
| 1 polyprism..... | 10. 00 |
| 1 photometer (loan)..... | 75. 00 |
| 1 microscope..... | 30. 00 |
| Platinum wire..... | 5. 00 |
| 6 lens holders..... | 5. 00 |
| 1 Coulomb torsion balance..... | 12. 00 |
| 1 Biot's hemispheres..... | 4. 25 |
| 1 electric chimes..... | 2. 00 |
| 1 electrostatic demonstration set..... | 7. 00 |
| 1 static electric machine..... | 50. 00 |
| 6 Leyden jars..... | 6. 00 |
| 1 hollow cylinder..... | 2. 00 |
| 4 electrophorus..... | 8. 00 |
| 4 cat's fur..... | 3. 00 |
| 3 electroscopes..... | 9. 00 |
| 2 lodestones..... | 1. 00 |
| 16 magnets..... | 2. 00 |
| 10 compasses..... | 2. 50 |
| 4 magnetic needles and stands..... | 4. 00 |
| 1 Ampere's stand..... | 17. 50 |
| 1 magnet and current rotation..... | 15. 50 |
| 1 contracting helix..... | 2. 00 |
| 1 parallel-current apparatus..... | 1. 50 |
| 1 Arago's magnetic rotations..... | 5. 50 |
| 2 coils for induction experiments..... | 13. 50 |
| 1 hand magneto..... | 10. 00 |
| 1 primary and secondary coil..... | 7. 00 |
| 1 rotating electro-magnet..... | 2. 00 |
| 7 electro-magnets..... | 14. 00 |
| 1 current indicator..... | 5. 00 |
| 1 motor rotator..... | 7. 00 |
| 1 motor rotator..... | 5. 00 |
| 1 magnetometer..... | 15. 00 |
| 1 distribution-of-magnetism apparatus..... | 8. 00 |
| 1 induction coil..... | 20. 00 |

| | |
|--|----------|
| 1 Whenelt interrupter..... | \$10. 00 |
| 1 experimental electro-magnet..... | 10. 00 |
| 1 demonstration induction coil..... | 5. 00 |
| 3 induction coils..... | 13. 50 |
| 1 induction coil..... | 16. 00 |
| 1 induction coil..... | 3. 00 |
| 3 sets telegraph instruments..... | 8. 00 |
| 1 telegraph relay..... | 3. 00 |
| 3 electric bells..... | 1. 50 |
| 2 call boxes..... | . 50 |
| 2 old Morse telegraph recorders..... | 1. 00 |
| 2 spark coils..... | 4. 00 |
| 1 thermopile..... | 15. 00 |
| 1 model of Gramime machine..... | 2. 50 |
| 1 galvanometer and reading telescope..... | 22. 00 |
| 1 lecture table galvanometer..... | 10. 00 |
| 4 galvanoscopes..... | 12. 00 |
| 1 tangent galvanometer..... | 18. 00 |
| 1 tangent galvanometer..... | 8. 00 |
| 1 tangent galvanometer..... | 9. 00 |
| 6 D'Arsonval galvanometers..... | 90. 00 |
| 1 volt-ammeter..... | 10. 00 |
| 4 Plucker tubes..... | 5. 00 |
| 4 Geissler tubes..... | 2. 00 |
| 2 copper voltmeters..... | 9. 00 |
| 5 electrolysis apparatus..... | 28. 00 |
| 4 telephone receivers..... | 4. 00 |
| 1 wireless telegraph set..... | 20. 00 |
| 2 fluorescopes..... | 18. 00 |
| 1 fluorescent glass globe..... | 7. 00 |
| Batteries, and parts storage batteries..... | 50. 00 |
| 1 mica condenser..... | 6. 00 |
| 1 $\frac{1}{2}$ M. F. condenser..... | 4. 80 |
| 1 $\frac{1}{4}$ M. F. condenser..... | 4. 40 |
| 1 $\frac{1}{1}$ M. F. condenser..... | 6. 00 |
| 1 megohm..... | 20. 00 |
| 3 sets resistance spools..... | 7. 50 |
| 9 Ziegler resistance boxes..... | 33. 00 |
| 4 circular resistance boxes..... | 7. 00 |
| 1 circular Wheatstone bridge..... | 12. 00 |
| 3 resistance boxes..... | 22. 50 |
| 2 P. O. Wheatstone bridge..... | 70. 00 |
| 4 P. O. Wheatstone bridge..... | 85. 00 |
| 1 slide wire bridge..... | 12. 00 |
| 2 slide wire bridges..... | 12. 00 |
| 2 slide wire bridges..... | 6. 00 |
| 1 slide wire bridge..... | 7. 00 |
| 1 Queen testing set..... | 100. 00 |
| 1 Wolf resistance box..... | 90. 00 |
| 1 Queen resistance box..... | 10. 00 |
| 5 commutators..... | 4. 00 |
| 1 50,000-ohm box..... | 20. 00 |
| 1 standard one-ohm coil..... | 12. 50 |
| 1 standard ten-ohm coil..... | 15. 00 |
| 8 ohm coils..... | 8. 00 |
| 1 Barlow's wheel..... | 4. 00 |
| 1 automatic electric stereopticon, with vertical attachment, aperture disk, etc..... | 200. 00 |
| 1 electric reflectoscope..... | 100. 00 |
| 400 lantern slides..... | 120. 00 |
| 20 pounds glass tubing..... | 9. 00 |
| Rubber tubing..... | 10. 00 |
| Brass wire..... | 1. 00 |
| Connectors, pinch corks, etc..... | 4. 00 |
| Hammer, saw, screw-drivers, wrench, pliers, brace and bits, nails, screws, punch, forceps, etc..... | 8. 00 |

| | |
|---|--------------------|
| 30 reagent bottles and chemicals..... | \$10. 00 |
| 10 Florence flasks..... | 2. 00 |
| 5 funnels..... | .50 |
| 20 beakers..... | 1. 50 |
| 30 volumes laboratory manuals..... | 30. 00 |
| Cork borers, cork press, corks..... | 2. 00 |
| 6 iron clamps..... | 1. 50 |
| 2 elevating stands..... | 2. 50 |
| Evaporating dishes, mortars, pipette, watch glasses, sand bath, test-tube holders and cleaners..... | 5. 00 |
| Total..... | <u>\$4,509. 50</u> |

ELECTRICAL LABORATORY.

| | |
|---|---------|
| 1 15-horsepower 220-volt United States motor..... | 300. 00 |
| Appliances with above motor..... | 75. 00 |
| 1 10-horsepower 220-volt Westinghouse motor..... | 950. 00 |
| 2 4-kilowatt 220-volt Westinghouse dynamos..... | |
| 1 3-horsepower 2-phase 200-volt Westinghouse motor..... | |
| 1 2-horsepower single-phase 200-volt Westinghouse motor..... | |
| 1 5-kilowatt 5-volt Hanson Van Winkle dynamo..... | 200. 00 |
| 1 5-kilowatt 220-volt Fort Wayne rotary converter..... | 342. 00 |
| 1 7½-kilowatt 220-volt 1, 2, and 3 phase alternator..... | 205. 00 |
| 1 3-horsepower automobile series motor..... | 35. 00 |
| 1 ½-horsepower Mather motor (loan)..... | 25. 00 |
| 1 3-horsepower Manchester motor..... | 25. 00 |
| 1 0.75-kilowatt Edison dynamo..... | 25. 00 |
| 1 series rheostat for series motor..... | 5. 00 |
| 1 Edison field rheostat (loan)..... | 20. 00 |
| Line shaft, pulleys, bearings, belts, clutch, etc., used in dynamo motor testing..... | 120. 00 |
| 1 friction brake..... | 20. 00 |
| 3 friction brakes..... | 8. 00 |
| Trestle for use with above..... | 1. 00 |
| Bases for dynamos and motors..... | 15. 00 |
| 3 exhibition boards with samples of electrical appliances..... | 15. 00 |
| 1 exhibition board with samples of electrical appliances..... | 3. 00 |
| 2 exhibition boards with samples of electrical appliances..... | 5. 00 |
| Miscellaneous assortment of armature coils and punchings..... | 5. 00 |
| Collection of insulating materials..... | 4. 00 |
| Wiring, material, and labor to the laboratories..... | 125. 00 |

Instruments.

| | |
|--|---------|
| 2 Weston type E ammeters with 10 shunts, 1-1, 3-10, 1-20, 2-50, 1-100, 1-200, 1-500..... | 70. 00 |
| 1 Weston voltmeter, 0-150, type E, with multiplier of 2 and 4..... | 30. 00 |
| 1 portable Weston voltmeter, double scale, 0-150 and 0-5..... | 60. 00 |
| 1 Weston ammeter, 0-15..... | 50. 00 |
| 1 Keystone ammeter, 0-15..... | 10. 00 |
| 1 Keystone voltmeter, 0-150..... | 10. 00 |
| 1 Queen ammeter, 0-15, 0-50..... | 10. 00 |
| 1 Queen voltmeter 0-15, 0-75, 0-150..... | 5. 00 |
| 1 Thompson voltmeter, 0-575..... | 5. 00 |
| 1 Stanley synchronizer, lamp pattern..... | 7. 00 |
| 1 15-volt General Electric alternating-current voltmeter, type P 1..... | 19. 12 |
| 1 150-300 volt General Electric voltmeter, P 1..... | 22. 11 |
| 8 alternating-current ammeters, General Electric, P 1..... | 110. 80 |
| 2 12-kilowatt General Electric P 1 wattmeters with multipliers..... | 98. 40 |
| 1 General Electric P 3 voltmeter with multiplier..... | 44. 00 |
| 1 Westinghouse power-factor meter with current and potential transformers..... | 102. 06 |
| 1 5-ampere Thompson integrating wattmeter (loan)..... | 22. 00 |
| 1 special flexible coupling for motor generator experiments..... | 8. 00 |
| Thompson ammeter, switchboard type..... | 5. 00 |
| Brush arc ammeter..... | 3. 00 |
| Thompson lightning arrester..... | 3. 00 |

| | |
|---|--------|
| Wurts lightning arrester..... | \$4.00 |
| 2 high-frequency coils, unmounted..... | 2.00 |
| 1 alternating-current arc lamp..... | 2.00 |
| 1 direct-current arc lamp (loan)..... | 2.00 |
| 2 automatic circuit breakers..... | 12.00 |
| 2 special resistance and 1 telephone receiver for use with curve tracer.... | 2.00 |
| 1 extension cord..... | 2.50 |
| Switches, cut-outs, cords, wires, insulators, connectors, screws, etc., for use in dynamo and motor testing..... | 10.00 |
| 3 3-kilowatt transformers..... | 200.00 |
| Electrostatic voltmeter..... | 75.00 |
| Stationary tachometer..... | 50.00 |
| 3 spring balances..... | 3.00 |
| 2 Coes wrenches..... | 2.75 |
| 3 screw-drivers..... | |
| 1 pair pliers..... | |
| 1 knife..... | |
| 3 speed indicators..... | 7.00 |
| Switchboard and testing table..... | 50.00 |
| Lamp banks with connections, 50 lamps..... | 60.00 |
| Special wiring for dynamos and motors..... | 60.00 |
| Stereopticon..... | 25.00 |
| Experimental arc lamp..... | 2.00 |
| Instrument case and shelving..... | 25.00 |
| 10 student lockers..... | 20.00 |
| Tool box..... | 2.00 |
| 3 stools..... | 3.00 |
| 2 large experimental magnets (loan)..... | 75.00 |

Standardizing room.

| | |
|---|--------|
| 1 Leeds-Northrup Type K potentiometer..... | 305.00 |
| 1 15-ampere shunt..... | |
| 1 volt box..... | |
| 1 Weston standard cell..... | |
| 4 cells storage battery..... | 30.00 |
| 2 cells gravity battery..... | |
| Lamp bank, switchboard, connections, shelving, etc..... | 25.00 |
| 2 stools..... | 2.00 |
| Volt-ammeter (vehicle type)..... | 25.00 |

Wireless telegraph room.

| | |
|--|--------------------|
| 1-horsepower Lundell motor..... | 50.00 |
| 1-kilowatt 2-phase generator..... | 50.00 |
| 2 D'Arsonval galvanometers..... | 25.00 |
| 1 Thompson galvanometer..... | 50.00 |
| 1 resistance box..... | 5.00 |
| 1 ½-kilowatt transmitting link coil and condenser..... | \$15.00 |
| 1-kilowatt transmitting link coil spark gap..... | 75.00 |
| 1 1-kilowatt 30,000-volt transformer..... | ^a 50.00 |
| 1 aerial switch..... | 5.00 |
| 1 loose couple receiving set complete..... | 50.00 |
| 2 head telephones..... | 15.00 |
| 1 switchboard for motor generator set..... | 10.00 |
| 2 tables..... | 6.00 |

| | |
|-------------------------|----------|
| Totals: | |
| Dynamos and motors..... | 2,528.00 |
| Instruments, etc..... | 1,465.28 |
| Standardizing room..... | 387.00 |
| Wireless telegraph..... | 406.00 |
| Grand total..... | 4,786.28 |

^a Loan.

DRAFTING AND CIVIL ENGINEERING.

| | |
|---|------------|
| 6 iron base drafting tables..... | \$48. 00 |
| 20 wooden drafting tables..... | 60. 00 |
| 6 sets of lockers and board racks..... | 220. 00 |
| File case, neostyle, globe..... | 25. 00 |
| Chest of drawers..... | 30. 00 |
| Drafting instruments..... | 20. 00 |
| 3 transits..... | 600. 00 |
| 1 transit..... | 25. 00 |
| 2 levels..... | 200. 00 |
| 1 level..... | 25. 00 |
| 1 sextant..... | 90. 00 |
| 1 compass..... | 20. 00 |
| 1 plane table..... | 75. 00 |
| Cement testing apparatus..... | 100. 00 |
| Hand levels, tapes, chains, pins, rods..... | 100. 00 |
| 1 planimeter..... | 35. 00 |
| 1 artificial horizon..... | 10. 00 |
| 1 set railroad curves..... | 50. 00 |
| 1 Thatcher machine..... | 30. 00 |
| 1 set plines..... | 25. 00 |
| Total..... | 1, 788. 00 |

MECHANICAL LABORATORY.

| | |
|---|----------------------|
| Westinghouse gas engine, 50-horsepower direct connected to 25-kilowatt alternating current direct current generator..... | 1, 800. 00 |
| Air compressor and tanks, part of above..... | 25. 00 |
| 2-horsepower Riker motor used with air compressor..... | 25. 00 |
| 2 ammeters..... | |
| 1 voltmeter alternating current, wall pattern..... | 44. 00 |
| Switches and wiring..... | 40. 00 |
| Switchboard..... | 75. 00 |
| Submerged wire rheostat..... | 25. 00 |
| 9-horsepower White & Middleton gasoline engine..... | 600. 00 |
| 10-gallon fuel oil tank in use with above..... | 10. 00 |
| 10-gallon fuel oil tank not in use..... | 6. 00 |
| 5-gallon gasoline tank, portable..... | 2. 00 |
| 50-pound platform scales..... | 5. 00 |
| 150-pound spring balances..... | 4. 00 |
| 100-pound spring balances..... | 3. 00 |
| Prony brake on Westinghouse engine..... | 25. 00 |
| Prony brake on W. & M. gasoline engine..... | 15. 00 |
| Piping for engines..... | 50. 00 |
| 3 old tables..... | 3. 00 |
| Westinghouse Junior steam engine, 25-horsepower (old)..... | ^a 150. 00 |
| A. & S. 60-horsepower steam engine (old)..... | 350. 00 |
| 12-horsepower Shepherd engine (new)..... | 300. 00 |
| 30-kilowatt W. T. H. dynamo (old)..... | 250. 00 |
| $\frac{1}{2}$ -ton refrigerating machine..... | 900. 00 |
| 40-horsepower vertical steam boiler (old)..... | 350. 00 |
| 15-kilowatt Westinghouse dynamo..... | 300. 00 |
| 3-horsepower 220-volt Sprague motor, with ref. machine..... | 45. 00 |
| C. S. pulley and belts..... | 15. 00 |
| Weighing tanks and platform scales for use with boiler plant..... | 15. 00 |
| Prony brake for A. & S. engine..... | 5. 00 |
| Prony brake for Shepherd engine with pulley..... | 10. 00 |
| Barrel rheostat for use in engine testing..... | 25. 00 |
| Switchboard and wiring for use with dynamos in engine testing..... | 80. 00 |
| Steam piping, including safety valve, steam separator, and trap..... | 200. 00 |
| Triple chain block (Weston)..... | 40. 00 |
| Parr coal calorimeter..... | 75. 00 |
| Peabody steam calorimeter..... | 5. 00 |

| | |
|--|--------------------------|
| Ellison steam calorimeter..... | \$20. 00 |
| Steam pump..... | 35. 00 |
| Platform scales for use with Prony brakes..... | 4. 00 |
| Small balances with weights..... | 4. 00 |
| Oil tank and cans..... | 2. 00 |
| Belting for engines..... | 45. 00 |
| Orsat gas analysis apparatus..... | 20. 00 |
| Anemometer..... | 22. 00 |
| Crosby steam indicator..... | 75. 00 |
| Ashcroft gas-engine indicator..... | 85. 00 |
| Amsler planimeter..... | 27. 00 |
| 3 thermometers..... | 4. 00 |
| 3 spring balances..... | 3. 00 |
| Speed indicator..... | 1. 00 |
| Block and falls..... | 6. 00 |
| Aluminum models of engine cylinders..... | 5. 00 |
| Rubber and asbestos packing, etc..... | 3. 00 |
| Iron wire for rheostats..... | . 50 |
| 3-inch 30-pound pressure gauge..... | 1. 00 |
| 4½-inch 200-pound pressure gauge..... | |
| 6-inch 30-pound pressure gauge..... | 1. 00 |
| Pressure gauge, 5-inch 30-pound gauge..... | 6. 00 |
| 10-inch 200-pound gauge..... | 10. 00 |
| 4 graphite crucibles..... | |
| Set products..... | 10. 00 |
| Laboratory bench..... | 2. 00 |
| 3 laboratory chairs..... | 2. 00 |
| Water meter..... | 10. 00 |
| Water-pressure tank (on roof)..... | 10. 00 |
| Total..... | <u><u>6, 290. 00</u></u> |

MECHANICAL ENGINEERING SHOPS.

| | |
|---------------------------------------|-----------|
| Fay & Egan combination saw table..... | 200. 00 |
| F. & E. wood planer..... | 350. 00 |
| Sebastian 9-inch lathe..... | 70. 00 |
| Barnes metal lathe..... | 50. 00 |
| Barnes wood lathe..... | |
| Old wood lathe..... | 30. 00 |
| Seneca Falls scroll saw..... | |
| Grindstones..... | 5. 00 |
| Drill press..... | 20. 00 |
| Countershafts..... | } 130. 00 |
| Belting..... | |
| Shaftings, pulleys..... | |
| 1 reflectoscope..... | 10. 00 |
| Wood and metal working bench..... | 20. 00 |
| 4 cabinetmaker's vises..... | 8. 00 |
| 14 assorted auger bits (old)..... | 5. 00 |
| 4 large calipers (old)..... | 3. 00 |
| 2 adzes (old)..... | 2. 00 |
| 5 auger handles..... | |
| 1 axe..... | 1. 50 |
| 1 hoe..... | . 60 |
| 3 picks..... | 2. 00 |
| 1 box opener..... | 1. 00 |
| 4 bench brushes..... | . 60 |
| 1 trowel..... | . 75 |
| 2 drawknives..... | 1. 50 |
| 2 braces..... | 3. 50 |
| 2 rip saws..... | 3. 40 |
| 6 long planes..... | 7. 20 |
| 4 jack planes..... | 4. 00 |
| 5 iron planes..... | 1. 40 |
| 4 crosscut saws..... | 5. 00 |
| 2 old crosscut saws..... | 2. 00 |

| | |
|--|---------|
| 1 hack saw..... | \$1. 25 |
| 1 compass saw..... | . 60 |
| 2 steel squares..... | 1. 50 |
| 4 3-inch try-squares..... | . 80 |
| 1 6-inch try-square..... | . 60 |
| 6 mallets..... | 1. 25 |
| 5 claw hammers..... | 2. 50 |
| 6 scratch gauges..... | 1. 60 |
| 1 oilstone | . 80 |
| 5 wooden clamps..... | 3. 00 |
| 5 1-inch chisels..... | 2. 50 |
| 4 12-inch chisels..... | 1. 40 |
| 4 $\frac{1}{2}$ -inch chisels..... | . 90 |
| 1 $\frac{1}{4}$ -inch chisel | . 60 |
| 1 $\frac{1}{2}$ -inch chisel | . 70 |
| 4 screw-drivers..... | 1. 00 |
| 1 screw-driver, set of 3 blades..... | 1. 00 |
| 1 screw-driver bit..... | . 15 |
| 2 gimlet bits..... | . 20 |
| 1 belt punch..... | 1. 75 |
| 4 bevels..... | 1. 00 |
| 4 nail sets..... | . 40 |
| 3 trestles..... | 3. 00 |
| 3 tool boxes (storage)..... | 7. 00 |
| 4 tool cabinets (student's)..... | 4. 00 |
| 1 instrument closet..... | 10. 00 |
| 2 tool racks..... | 3. 00 |
| 1 saw vise..... | 1. 00 |
| 12 wood-turning tools..... | 2. 50 |
| 1 depth gauge..... | . 25 |
| 2 sets Jennings bits..... | 9. 00 |
| 1 set steel figures..... | 1. 25 |
| 1 hack-saw frame..... | . 85 |
| 12 hack-saw blades..... | . 50 |
| 1 file brush..... | . 25 |
| 11 files..... | 5. 00 |
| 1 screw-driver 14 inch..... | 1. 00 |
| 1 carpenter's level..... | 1. 00 |
| 1 pipe stock (2 dies)..... | 7. 00 |
| 4 ball pean hammers..... | 3. 50 |
| 1 pair 6-inch pliers..... | . 60 |
| 1 4-foot crowbar..... | 1. 00 |
| 1 5-foot crowbar | 1. 25 |
| 2 iron clamps..... | 1. 00 |
| 1 stock and $\frac{1}{2}$ -inch die..... | 1. 00 |
| 1 plumb bob..... | . 20 |
| 1 set small twist drills..... | 3. 00 |
| 1 set (20) twist drills..... | 8. 00 |
| 1 drill chuck..... | 3. 00 |
| 2 Stilson wrenches..... | 2. 00 |
| 3 Coes wrenches..... | 1. 00 |
| 1 gas plier..... | . 25 |
| 1 pair pipe tongs..... | . 75 |
| 1 pair blacksmith tongs..... | . 50 |
| 1 blacksmith forge..... | 20. 00 |
| 1 ball pean hammer..... | . 50 |
| 1 large ladle..... | 1. 00 |
| 4 iron vises..... | 20. 00 |
| 6 lathe dogs..... | 10. 00 |
| 10 mandrels..... | 15. 00 |
| 3 center punches..... | . 45 |
| 4 scribes..... | 1. 50 |
| 2 countersinks..... | . 40 |
| 1 Armstrong boring tool..... | 3. 00 |
| 1 Armstrong thread-cutting tool..... | 2. 50 |
| 15 metal lathe tools..... | 4. 00 |
| 2 combination squares..... | 3. 00 |

| | |
|--|-------------------|
| 1 steel scale, 10 inches..... | \$. 75 |
| 1 adjustable (special) dog..... | 1. 00 |
| 1 $\frac{1}{2}$ -inch die and tap..... | 2. 00 |
| 3 cape chisels..... | 1. 25 |
| 7 flat chisels..... | 1. 75 |
| 2 dividers..... | . 75 |
| 2 outside calipers..... | 1. 25 |
| 2 inside calipers..... | 1. 25 |
| 7 thread-chasing tools..... | 1. 75 |
| 1 micrometer caliper..... | 4. 00 |
| 2 edge pean hammers..... | 1. 00 |
| 1 24-inch pinch bar..... | . 75 |
| 1 extension lamp and cord..... | 1. 00 |
| 1 pipe vise..... | 8. 00 |
| Total..... | <u>1, 148. 45</u> |

SUMMARY OF INVENTORIES.

| | |
|------------------------------|-------------------|
| Physics and electricity..... | 4, 509. 50 |
| Electrical engineering..... | 4, 786. 28 |
| Civil engineering..... | 1, 788. 00 |
| Mechanical engineering..... | <u>7, 438. 45</u> |
| Total..... | 18, 522. 23 |

NOTE.—The value of the equipment in chemistry and geology, used by engineering students, is not given in this inventory.

EXHIBIT B.

DIVISION OF ARCHITECTURE.

To the PRESIDENT THE GEORGE WASHINGTON UNIVERSITY.

SIR: In reply to your request of April 29 I have the honor to hand you herewith a statement of the facilities for educational work offered by your college of architecture under its present equipment, made up under heads given in your appended "Memorandum for statement," as follows:

BUILDING AND FACILITIES FOR TEACHING.

1. House, No. 1532 I street, sole use of five floors and attic on plan of 20 feet by 55 feet inside; in all, 5,900 square feet.

| | |
|---|---------------|
| Basement: | Square feet. |
| Front room..... | 320 |
| Back room..... | 418 |
| First floor: | |
| No. 1. Office and library..... | 371 |
| No. 2. Lecture room..... | 430 |
| Second floor: | |
| No. 3. Drafting room..... | 390 |
| Ante. Drafting room..... | 203 |
| No. 4. Drafting room..... | 390 |
| Third floor: | |
| No. 5. Lecture room..... | 350 |
| Lavatory..... | |
| No. 6. Drafting room..... | 340 |
| Fourth floor: | |
| No. 7. Free-hand and water-color drawing room..... | 400 |
| No. 8. Free-hand and water-color drawing room..... | 259 |
| No. 9. Drafting room..... | 136 |
| Attic: | |
| Storerooms..... | 400 |
| Furnace rooms, corridors, stairs, and closet space..... | <u>1, 493</u> |

5, 900

NOTE.—Depth of yard in rear, 32 feet.

2. *Class rooms.*

| Basement. | Present use. | Proposed use. * | Capacity. |
|-----------------|---------------------------|--------------------------|------------------|
| | | | <i>Students.</i> |
| Front room..... | Storage..... | Modeling..... | 15 |
| Back room..... | Club room..... | Sketch and life class... | 20 |
| First floor: | | | |
| No. 2..... | Lecture room..... | | 40 |
| Third floor: | | | |
| No. 5..... | do..... | | 40 |
| Fourth floor: | | | |
| No. 7..... | {Free-hand drawing..... | | 22 |
| | {Water color drawing..... | | 16 |
| No. 8..... | {Free-hand drawing..... | | 8 |
| | {Water color drawing..... | | 6 |

3. *Laboratories.*

| | Use. | Square feet. | Equipment. |
|-------------------------|-----------------------------------|--------------|---|
| Second floor: | | | |
| No. 3..... | Drafting room..... | 390 | 11 drafting tables. |
| Anteroom..... | Drafting and lockers..... | 203 | 3 drafting tables and 40 lockers. |
| No. 4..... | Drafting room..... | 390 | 11 drafting tables. |
| Third floor, No. 6..... | Drafting-room closet..... | 340 | 10 drafting tables, sink, and 8 lockers. |
| Fourth floor: | | | |
| No. 7..... | Free-hand and water-color room... | 400 | Casts, models, easels, chairs, tables stools. |
| No. 8..... | do..... | 259 | Do. |
| No. 9..... | Drafting room..... | 136 | 5 drafting tables. |

(For equipment, see inventories following.)

4. *Present enrollment and possible accommodation.*

| | Enrolled this year. | Can accommodate. |
|---|---------------------|------------------|
| Laboratories (drafting rooms): | | |
| No. 3..... | 64 | 180 |
| No. 4..... | | |
| No. 6..... | | |
| No. 9..... | | |
| Laboratories (free-hand and water-color): | | |
| No. 7..... | 50 | 210 |
| No. 8..... | | |

NOTE.—The estimated increase in the working efficiency of present equipment is based upon proposed division of enlarged classes into sections.

SCHEDULE OF EQUIPMENT.

Basement:

Back room.—Range, sink, 12 chairs, 6 casts.

Club room.—Burlap, dado, and cup shelf.

First floor:

No. 1 (office and library).—1 desk; 1 stand; deep drawers; 2 drafting tables; 1 drafting board and trestles; 1 table; 1 stand of shelves; book shelving; 4 chairs; 4 stools; 7 large rendered drawings from antique monuments; 1 desk drop; 100 slides. (Books listed in librarian's statement).

No. 2 (lecture room).—3 tables; 1 lantern and stand; 19 chairs; 1 blackboard, 3 by 12 feet; photographs, diagrams, books (in weekly loans from Library of Congress); 1 plaster Tondo (Michael Angelo).

Second floor:

No. 3 (drafting room).—11 drafting tables; 1 blackboard, 3 feet by 6 feet; 5 stools; 8 rendered drawings.

Anteroom.—Stand of 40 lockers; 1 large rendered drawing.

No. 4 (drafting room).—11 drafting tables; 3 stools; 1 blackboard, 3 feet by 6 feet; 8 drawings.

Third floor:

No. 5 (lecture room).—1 table; 1 blackboard, 3 feet by 12 feet; 30 chairs; 5 large rendered drawings.

No. 6 (drafting room).—10 drafting tables; 1 blackboard, 3 feet by 6 feet; 4 stools; sink; shelving; 5 rendered drawings; and 1 stand of 8 lockers.

Fourth floor:

No. 7 (free-hand and water-color drawing).—4 small tables; 24 stools; 6 easels; 1 stand; shelving; and casts as follows:

Figures—

| | |
|------------------------------------|---------|
| 1 Venus of Melos..... | \$10.00 |
| 1 Hermes..... | 6.00 |
| 1 Hermles..... | 6.00 |
| 1 Germanicus..... | 6.00 |
| 1 muscles..... | 3.00 |
| 4 statuettes by Daniel French..... | 20.00 |
| 1 eagle..... | 5.00 |

Busts—

| | |
|------------------------|------|
| 1 block bust..... | 3.00 |
| 1 block bust..... | 2.00 |
| 1 Roman..... | 4.00 |
| 1 Caesar..... | 4.00 |
| 1 Florentine lady..... | 4.00 |

Caps—

| | |
|-------------------|------|
| 1 Ionic..... | 5.00 |
| 1 Ionic..... | 5.00 |
| 1 Corinth..... | 6.00 |
| 1 Ionic..... | 5.00 |
| 1 cap (eggs)..... | 4.00 |
| 5 small caps..... | 5.00 |

Wall pieces:

| | |
|-------------------------------|-------|
| 1 medallion..... | 5.00 |
| 1 bracket..... | 4.00 |
| 1 bracket..... | 2.00 |
| 1 medallion..... | 1.00 |
| 1 entablature..... | 5.00 |
| 1 entablature..... | 1.50 |
| 1 scroll..... | 2.50 |
| 1 eggs detail..... | 3.00 |
| 1 mask..... | 3.00 |
| 1 mask..... | 1.50 |
| 1 lion's head..... | 5.00 |
| 1 buerane..... | 4.00 |
| 1 arm..... | 1.00 |
| 1 lion's head..... | 2.00 |
| 1 block face..... | 1.50 |
| 1 part face..... | 1.00 |
| 1 acanthus..... | 2.00 |
| 3 large rosettes..... | 6.00 |
| 1 relief, Donatello..... | 4.00 |
| 1 relief..... | 2.00 |
| 1 relief..... | 2.00 |
| 1 relief..... | 1.50 |
| 10 small reliefs..... | 10.00 |
| 1 small relief..... | 2.00 |
| 1 bracket..... | 1.50 |
| 10 small school pieces..... | 5.00 |
| 1 tondo (Michael Angelo)..... | 15.00 |

Total estimated value..... 197.00

No. 8 (free-hand and water-color drawing). One desk and chair; 2 small tables; 1 book shelf; 1 drafting table; 4 chairs; 2 stools; 3 easels; 1 blackboard (movable); 50 volumes loaned from private library.

No. 9 (drafting room). Three drafting tables; 1 stool.

EXHIBIT C.

COLLEGE OF VETERINARY MEDICINE.

Buildings and facilities for instruction.

College of Veterinary Medicine, Nos. 2113-2115 Fourteenth street NW. Lot, 42 by 150 feet, contains 3 buildings.

A. First floor, 42 by 40 feet. Office and waiting room, 15 by 20 feet; pharmacy, 10 by 15 feet, fully equipped; canine operating room, 10 by 10 feet; lavatory, 5 by 10 feet; library and reading room, 15 by 30 feet; faculty room, 20 by 20 feet; toilet, 5 by 5 feet. Second floor and third floor, 4 dormitories of 5 rooms each.

B. Canine hospital, one story and basement, 12 by 40 feet. (a) Basement contains 2 wards of 10 cages each; 1 ward of 2 large retention cages, and a boiler room for entire plant. (b) First floor contains main ward and 6 apartments. Cat ward, with 12 cages.

C. Veterinary hospital, two stories high. Lot 40 by 60 feet. (a) First floor contains 10 straight stalls, 1 water stall, 2 box stalls, and a round stall for colic cases; ample floor space for examination and minor operating; electric lighting. (b) Second floor contains 2 lecture rooms, 20 by 30 feet, which can be used as one or two rooms; accommodates 125; number of students enrolled, 54.

D. Veterinary surgery, an annex to C forming its entrance, 25 by 30 feet. Skylights and electrically lighted. Fitted with operating table and throwing mattress, ropes, hobbles, etc.

Dissecting hall and pharmacy laboratory, No. 2116 Fourteenth street NW. First floor 20 by 40, concrete floor, gaslight, 10 dissecting tables, 1 operating table, stock grindstone, injection pump, toilet, etc.; accommodates 75 students. Second floor: Pharmacy, 20 by 40 feet. Three lines of tables, with equipment for pharmacy work, accommodating 75 students at class period; number of students in class, 20.

Schedule of equipment.

General equipment:

| | |
|----------------------|----------|
| Tables..... | \$300.00 |
| Chairs..... | 50.00 |
| Bottles..... | 200.00 |
| Scales..... | 100.00 |
| Drugs, etc..... | 100.00 |
| Stove..... | 15.00 |
| Public pharmacy..... | 400.00 |

1, 165.00

Dissecting room:

| | |
|-----------------------|--------|
| 10 tables..... | 100.00 |
| Operating tables..... | 40.00 |
| Grindstone..... | 5.00 |
| Injection pump..... | 8.00 |
| Knives..... | 5.00 |
| Chairs..... | 50.00 |
| Stove..... | 20.00 |

228.00

Veterinary surgery:

| | |
|------------------------------------|--------|
| Mattress..... | 50.00 |
| Ropes..... | 50.00 |
| Hobbles..... | 50.00 |
| Slings (2 sets), at \$50 each..... | 100.00 |
| Operating table..... | 100.00 |
| Ambulance horse..... | 350.00 |
| Operating set..... | 50.00 |
| Dental set..... | 40.00 |

790.00

Canine surgery:

| | |
|-----------------------|-------|
| Table..... | 5.00 |
| 1 operating case..... | 50.00 |
| 1 operating case..... | 10.00 |
| Sundries..... | 50.00 |

115.00

Résumé.

| | |
|-------------------------|--------------|
| General equipment..... | \$1, 165. 00 |
| Dissecting room..... | 228. 00 |
| Veterinary surgery..... | 790. 00 |
| Canine surgery..... | 115. 00 |
| | <hr/> |
| | 2, 298. 00 |
| | <hr/> |

EXHIBIT D.

THE GEORGE WASHINGTON UNIVERSITY,
Washington, D. C., May 6, 1910.

CHAS. W. NEEDHAM, LL. D.,

President, The George Washington University, Washington, D. C.

DEAR SIR: Agreeably to your request of April 29, 1910, I desire to present a statement of the condition of the National College of Pharmacy, originally organized under the laws of the District of Columbia, November 11, 1872, for the purpose of giving instruction in pharmacy, materia medica, chemistry and kindred sciences, and for upholding the standard and authority of the United States Pharmacopœia, and now operating under a separate charter, in its financial affairs independent of any other institution or school for teaching, not deriving support from other sources than from the fees from tuition and from the annual dues paid by its members, and which National College of Pharmacy by affiliation in February, 1906, became a member of the educational system of the George Washington University by reincorporation under the act of Congress of March 3, 1905, providing for the organization of colleges and is designated in its relation to the George Washington University as National College of Pharmacy. By virtue of this affiliation the resources of the university are increased only by the receipt of \$10 for diploma fee for each graduate.

The statement that is herewith presented is a true exhibit of all resources and facilities for education possessed by National College of Pharmacy with the number of students in attendance at this date, as shown by the roll books.

Yours, very respectfully,

H. E. KALUSOWSKI, *Dean.*

One building situated at 808 I street NW., three stories in height, with basement.

One lecture room, first floor, 61 by 27 feet, with tables and chairs to accommodate 66 students.

One reception room 9 by 10 feet.

One office room 9 by 10 feet.

One room for microscopes and accessories 9 by 10 feet.

One pharmaceutical laboratory, second floor, 34 by 27 feet. Total accommodations 84 students, accommodating at one time 45. Desk space for each 2 feet 10 inches by 1 foot 10 inches. Gas burners for each desk. Five sinks with 10 water taps. One large fume closet 6 by 3 feet.

One stock room 12 by 12 feet.

One stock room 9 by 6 feet.

One library room 22 by 10 feet.

One room for chemical, pharmaceutical, and botanical specimens 17 by 10 feet.

Microscopic laboratory (the lecture room), 61 by 27 feet, accommodates at one time 32 students; supplied with 16 adjustable pendant electric lights.

One chemical laboratory 60 by 27 feet, containing 197 running feet of working desk space comprising 55 single desks 3 feet 7 inches by 1 foot 6 inches. Each desk supplied with gas and bunsen burners. A total of 143 locked drawers containing apparatus for students' use and 80 closets similarly supplied. (Drawers 18 inches square, closets 26 inches by 19 inches by 18 inches.) Six fume closets 4 feet by 1 foot 6 inches for reactions evolving noxious fumes, space below same provided with 11 drawers containing apparatus and closet 2 feet 8 inches by 2 feet 6 inches by — feet for storage of mineral acids. One apparatus closet 9 feet 4 inches by 3 feet 6 inches by 1 foot 8 inches. One drying table 2 feet by 4 feet, two working tables 2 feet by 4 feet. Twelve water taps. Three hundred and ninety feet of narrow shelving above desks containing about 1,650 bottles, 1, 2, 4, and 8 ounce, containing chemicals, reagents, test solutions, etc.

One instructor's chemical laboratory and stock room 10 feet by 22 feet. Desk space 10 feet by 18 inches, space below divided into lockers and drawers. One working

table 5 feet 9 inches by 2 feet, containing drawer filled with labels for reagents. One apparatus closet 9 feet by 4 feet by 1 foot. Twenty feet of narrow shelving containing 70 bottles of chemicals, reagents, etc., and 114 feet of 12 inch wide shelving containing 650 bottles, cans, jars, etc., of C. P. chemicals, technical chemicals, reagents in bulk, test solutions, test papers, etc. One sink with two water taps.

One janitor's room 17 by 10 feet.

Inventory of machinery and equipment of chemical laboratory, instructor's chemical laboratory, and stock room third floor.

| | |
|--|----------|
| 650 bottles, jars, cans, etc., containing C. P. chemicals, technical chemicals, reagents in bulk, test solutions, etc..... | \$200.00 |
| 25 7-pound bottles mineral acids..... | 43.75 |
| 1,720 small bottles (1, 2, 4, and 8 ounce bottles) of chemicals, reagents, test solutions, etc..... | 239.50 |
| 191 beakers, at 18 cents..... | 34.38 |
| 153 crucibles, at 18 cents..... | 27.54 |
| 117 evaporating dishes, at 20 cents..... | 23.40 |
| 135 packages filter paper, at 10 cents..... | 13.50 |
| 101 flasks, at 10 cents..... | 10.10 |
| 47 graduates, at 45 cents..... | 21.15 |
| 51 mortars and pestles, at 50 cents..... | 25.50 |
| 5 notebooks, at 5 cents..... | .25 |
| 113 pliers, at 25 cents..... | 28.25 |
| 141 dozen test tubes, at 30 cents..... | 42.30 |
| 100 dozen test stands, at 55 cents..... | 55.00 |
| 30 pounds glass tubing and rod..... | 15.00 |
| 100 watch glasses, at 3 cents..... | 3.00 |
| 200 wire triangles, at 5 cents..... | 10.00 |
| 160 ignition tubes, at 8 cents..... | 12.80 |
| 55 adapters, at 5 cents..... | 2.75 |
| 50 tubulated retorts, at 30 cents..... | 15.00 |
| 50 glass cylinders, at 25 cents..... | 12.50 |
| 200 wire gauze, at 10 cents..... | 20.00 |
| 139 funnels, at 10 cents..... | 13.90 |
| 57 wash bottles, at 35 cents..... | 19.95 |
| 58 carbon dioxide tubes, at 2 cents..... | 1.16 |
| 50 platinum wires, at 10 cents..... | 5.00 |
| 34 blue glass..... | 1.70 |
| 61 burettes, at \$2..... | 122.00 |
| 56 burette holders, at 50 cents..... | 28.00 |
| 40 burette tips, at 5 cents..... | 2.00 |
| 52 pipettes, at 65 cents..... | 33.80 |
| 32 100-cubic centimeter graduates, at 65 cents..... | 20.80 |
| 30 500-cubic centimeter flasks, at 35 cents..... | 10.50 |
| 43 100-cubic centimeter stoppered flasks, at 35 cents..... | 15.05 |
| 28 200-cubic centimeter Florence flasks, at 16 cents..... | 4.48 |
| 52 250-cubic centimeter Florence flasks, at 20 cents..... | 10.40 |
| 12 tubulated test tubes..... | .72 |
| 500 corks, No. 5..... | .95 |
| 1 lot rubber stoppers..... | 5.00 |
| 1 mercury bath..... | .80 |
| 36 iron ignition spoons, at 15 cents..... | 5.40 |
| 36 Hessian crucibles, at 5 cents..... | 1.80 |
| 50 blowpipes, at 15 cents..... | 7.50 |
| 6 urea determination outfits, at 30 cents..... | 1.80 |
| 45 china plates, at 10 cents..... | 4.50 |
| 1 Kipps apparatus..... | 4.50 |
| 1 4-tube bunsen burner..... | 1.75 |
| 2 copper retorts, at \$1.80..... | 3.60 |
| 1 Fletcher blast lamp..... | 10.00 |
| 3 gas stoves, at \$1..... | 3.00 |
| 2 5-inch steel spatulas, at 35 cents..... | .70 |
| 3 2-inch steel spatulas, at 25 cents..... | .75 |
| 12 3-inch steel spatulas, nickeled, at 50 cents..... | 6.00 |
| 2 dozen thistle tubes, at \$1.20..... | 2.40 |
| 7 mortars and pestles, at 65 cents..... | 4.55 |

| | |
|---|------------|
| 2 dozen test-tube holders, at \$1.80..... | \$3. 60 |
| 48 s. m. bottles, at 11 cents..... | 5. 28 |
| 50 2-ounce glass-stopper bottles, at 9½ cents..... | 4. 75 |
| 100 4-ounce glass-stopper bottles, at 11 cents..... | 11. 00 |
| 144 4-ounce bottles, at 4 cents..... | 5. 76 |
| 35 grams platinum foil, at \$1.02..... | 35. 70 |
| 25 grams silver foil..... | 1. 20 |
| 2 precipitating cylinders, at \$1.50..... | 3. 00 |
| 1 pair Becker long-arm balances and weights..... | 125. 00 |
| 1 pair prescription scales..... | 20. 00 |
| 8 pairs Troemner scales..... | 60. 00 |
| 1 pair 2-kilo scales and weights..... | 16. 00 |
| 1 distilled-water condenser, etc..... | 25. 00 |
| 100 Bunsen burners, at 35 cents..... | 35. 00 |
| 80 retort stands, at 45 cents..... | 36. 00 |
| 120 feet rubber tubing..... | 7. 00 |
| 3 3-liter beakers..... | 3. 00 |
| 1 2-liter beaker..... | . 80 |
| 2 large glass funnels..... | . 70 |
| 7 1-liter beakers, at 40 cents..... | 2. 80 |
| 2 large iron mortars and pestles, at \$2.70..... | 5. 40 |
| 1 2-liter stoppered flask..... | 2. 40 |
| 5 1-liter stoppered flask, at \$1.60..... | 8. 00 |
| 3 ½-liter stoppered flasks, at \$1.20..... | 3. 60 |
| 1 ¼-liter stoppered flask..... | 1. 00 |
| 1 200-cubic-centimeter stoppered flask..... | . 90 |
| 1 50-cubic-centimeter stoppered flask..... | . 60 |
| 1 separatory funnel..... | 2. 00 |
| 3 iron tripods, at 40 cents..... | 1. 20 |
| 1 1-liter graduate..... | 3. 00 |
| 1 ½-liter graduate..... | 2. 00 |
| 2 wooden funnel stands, at 65 cents..... | 1. 30 |
| 1 Fletcher gas furnace for crucibles..... | 20. 00 |
| Desks, tables, hoods, shelving, etc. (chemical laboratory)..... | 600. 00 |
| Labels for reagent bottles, etc..... | 30. 00 |
| 6 4-cluster Welsbach lights..... | 60. 00 |
| Total for chemical laboratory..... | 2, 353. 12 |

Apparatus in use in the pharmaceutical laboratory.

| | |
|--|--------|
| 36 weighing bottles..... | 7. 20 |
| 40 porcelain crucibles..... | 10. 00 |
| 45 wire triangles..... | 4. 50 |
| 75 burettes, 50 cubic-centimeter graduates in 1610s..... | 52. 50 |
| 180 burette clamps..... | 45. 00 |
| 275 beakers, 120 cubic centimeters..... | 14. 11 |
| 5 gross test tubes, 5 and 6 inches..... | 15. 00 |
| 75 glass evaporating dishes, 2-ounce..... | 9. 00 |
| 80 porcelain evaporating dishes, 4-ounce..... | 8. 00 |
| 60 porcelain evaporating dishes, 16-ounce..... | 13. 50 |
| 30 assay flasks, 16-ounce..... | 3. 00 |
| 61 glass-stoppered Erlenmeyer flasks, 120 cubic centimeters..... | 8. 75 |
| 20 mortars and pestles, No. 2 wedgwood..... | 12. 00 |
| 86 mortars and pestles, No. 1 wedgwood..... | 51. 60 |
| 2 mortars and pestles, No. 4 wedgwood..... | 2. 00 |
| 1 mortar and pestle, No. 10 wedgwood..... | 3. 75 |
| 85 steel spatulas, 7-inch..... | 42. 25 |
| 105 steel spatulas, 4-inch..... | 30. 15 |
| 14 hard-rubber spatulas, 7-inch..... | 11. 20 |
| 45 packs filter paper, 3-inch..... | 6. 70 |
| 25 packs filter paper, 5-inch..... | 6. 00 |
| 40 packs filter paper, 7½-inch..... | 13. 00 |
| 15 pounds solid glass rod, cut to length and uncut..... | 4. 50 |
| 30 pounds glass tubing, ¼ inch to ½ inch diameter..... | 9. 00 |
| 5 pounds glass tubing, ¾ inch, cut to 14-inch lengths..... | 1. 50 |
| 66 funnels, glass, pints..... | 19. 80 |

| | |
|---|---------|
| 45 funnels, glass, $\frac{1}{2}$ -pint | \$9. 90 |
| 90 funnels, glass, $\frac{1}{4}$ -pint..... | 9. 00 |
| 48 funnels, glass, 2-ounce..... | 3. 88 |
| 75 funnels, glass, 1-ounce..... | 5. 25 |
| 60 cylindrical graduates, 100 cubic centimeters | 36. 00 |
| 30 cylindrical graduates, 25 cubic centimeters..... | 9. 00 |
| 54 duplex cylindrical graduates, 4 fluid ounces, 120 cubic centimeters.... | 35. 10 |
| 61 volumetric glass measuring flasks, 250 cubic centimeters..... | 18. 75 |
| 28 volumetric glass measuring flasks, 100 cubic centimeters..... | 14. 00 |
| 4 volumetric glass measuring flasks, 1,000 cubic centimeters..... | 4. 00 |
| 91 glass flasks, 500 cubic centimeters | 12. 80 |
| 58 glass flasks, 250 cubic centimeters | 6. 25 |
| 267 glass flasks, 120 cubic centimeters | 22. 00 |
| 65 test-tube racks..... | 39. 00 |
| 15 Liebig condensers with rubber tubing (120 feet)..... | 7. 50 |
| 14 brass sieves, No. 100 to No. 12..... | 8. 50 |
| 48 test-tube clamps, brass..... | 7. 20 |
| 50 separatory funnels, 120 cubic centimeters, glass-stoppered..... | 25. 00 |
| 25 pipettes, 10 cubic centimeters..... | 2. 50 |
| 30 pipettes, 5 cubic centimeters..... | 2. 00 |
| 32 bottles blue litmus strips (100) | 3. 20 |
| 36 bottles red litmus strips (100)..... | 3. 60 |
| 16 pounds rubber stoppers, 1 and 2 perforations..... | 30. 00 |
| 60 graduated receiving jars, 32-ounce..... | 35. 00 |
| 24 beakers, 240 cubic centimeters..... | 1. 44 |
| 80 water baths and covers, enamel ware..... | 8. 00 |
| 10 thistle tubes, 12-inch stem..... | 1. 00 |
| 122 percolators, 1 pint capacity..... | 24. 00 |
| 75 sand baths, tin..... | 3. 75 |
| 100 percolator packers, wood..... | 1. 00 |
| 250 rubber covers for percolators..... | 3. 50 |
| 58 retort stands, iron..... | 60. 00 |
| 36 porcelain pill tiles..... | 39. 00 |
| 12 pill-making machines..... | 30. 00 |
| 10 tablet triturate molds..... | 17. 50 |
| 50 suppository boards, hard oak..... | 25. 00 |
| 40 pill finishers, boxwood..... | 8. 77 |
| 6 dozen amber glass jars, with nickel tops, 4-ounce..... | 2. 40 |
| 24 dozen amber glass jars, with nickel tops, 1-ounce..... | 6. 00 |
| 36 dozen powder boxes..... | 4. 50 |
| 36 dozen suppository boxes..... | 6. 00 |
| 48 dozen pill boxes..... | 3. 00 |
| 2 gross 2-ounce vials..... | 5. 00 |
| 1 gross 4-ounce vials..... | 3. 00 |
| 1 gross 8-ounce vials..... | 4. 00 |
| 1 gross 8-ounce vials, glass-stoppered..... | 8. 00 |
| 2 gross 4-ounce vials, glass-stoppered..... | 12. 00 |
| 1 gross 3-ounce vials..... | 2. 75 |
| 1 gross 1-ounce vials..... | 2. 50 |
| 1 gross 16-ounce vials..... | 7. 50 |
| 1 $\frac{1}{2}$ gross 1-ounce vials, glass-stoppered..... | 7. 50 |
| 6,000 empty capsules..... | 3. 60 |
| 4,000 powder papers..... | 2. 40 |
| 1 Enterprise drug mill..... | 7. 00 |
| 1 Enterprise drug mill..... | 3. 50 |
| 1 Enterprise drug cutter..... | 2. 50 |
| 65 pounds assorted ground drugs, for use in laboratory work..... | 14. 00 |
| 1 copper still, 5-gallon..... | 12. 00 |
| 1 copper still, 2-gallon..... | 5. 00 |
| 2 copper stills, 1-gallon..... | 14. 00 |
| 1 $\frac{1}{2}$ gross rulers, inches and metric system..... | 6. 48 |
| 12 precipitating jars, $\frac{1}{2}$ gallon..... | 6. 00 |
| 1,018 bottles containing chemicals, chemical reagents, and drugs for use in laboratory work..... | 65. 00 |
| 2 250-cubic centimeter flasks graduated in 1/10, for oil determinations.... | 1. 50 |
| 4 suppository machines..... | 12. 00 |
| 1 Gooch crucible porcelain..... | 1. 25 |

| | |
|---|---------|
| 5 hot-water funnels..... | \$5. 00 |
| 1 florentine receiver, 1 pint..... | .50 |
| 1 infusion mug, china..... | .90 |
| 1 hot-water oven, 6 by 6 by 8..... | 2. 00 |
| 1 dessicator..... | 9. 00 |
| 1 troche-making machine..... | 4. 00 |
| 3 reflex condensers..... | 3. 75 |
| 8 glass retorts..... | 2. 00 |
| 1 porcelain retort..... | 2. 50 |
| 1 refractometer for testing oils..... | 60. 00 |
| 1 Westpahl balance..... | 9. 00 |
| 30 Bunsen burners..... | 10. 50 |
| 30 chemical thermometers..... | 39. 00 |
| 2 balances for coarse weighings and weights..... | 12. 00 |
| 60 empty reagents bottles, 4 ounce and 8 ounce, labeled by etching..... | 9. 00 |
| 15 balances for fine weighings..... | 150. 00 |
| 1 analytical balance..... | 60. 00 |
| 10 sets apothecaries' weights..... | 3. 00 |
| 16 sets metric weights, 1 milligram to 100 grams..... | 32. 00 |
| 2 sets glass weighing pans..... | 1. 50 |
| 11 hand balances, brass..... | 11. 00 |
| 36 gas stoves..... | 18. 00 |
| 2 hot-water copper ovens, 10 by 10 by 8..... | 18. 00 |
| 4 4-cluster Welsbach lights..... | 40. 00 |
| 1 gelatine pill-coating machine..... | 10. 00 |
| 1 tincture press, 1 quart, iron..... | 2. 25 |
| 1 Kellogg gasoline burner..... | 3. 50 |
| 1 tablet compressing machine..... | 75. 00 |
| 2 glass alcohol burners..... | .70 |
| 5 gross cork stoppers, assorted..... | .85 |
| 479 mineral specimens, labeled and in separate containers..... | 60. 00 |
| 287 bottles containing rare chemicals, metals..... | 30. 00 |
| 2 apparatus for electrolysis of water..... | 13. 50 |
| 1 barometer, mercurial..... | 3. 00 |
| 2 nitrometers and stand..... | 11. 00 |
| 1 endiometer..... | 9. 00 |
| 259 bottles containing alkaloids, synthetic compounds, organic compounds..... | 20. 00 |
| 208 botanical specimens, labeled and in wood containers..... | 12. 00 |
| 12 urinometers, cases, and jars..... | 10. 00 |
| 2 ureameters..... | 2. 00 |
| 11 hydrometers, for heavy and light liquids..... | 7. 00 |
| 4 alcoholometers..... | 3. 00 |
| 5 steel crucible tongs..... | 1. 00 |
| 12 specific gravity flasks, 50 grams..... | 18. 00 |
| 3 dozen watch glasses..... | .75 |
| 12 18-inch hydrometer jars..... | 6. 00 |
| 296 botanical specimens in glass containers..... | 50. 00 |
| Cabinets for use in general chemistry contain: | |
| 12 iron stands, burette and retort..... | 18. 00 |
| 6 burette clamps..... | 2. 40 |
| 5 gross test tubes, assorted, Bohemian..... | 15. 00 |
| 6 iron tripods..... | 1. 50 |
| 4 Bunsen burners..... | 3. 75 |
| 20 beakers, 240 cubic centimeters..... | 3. 40 |
| 1 pneumatic trough..... | 2. 20 |
| 1 mercury trough..... | 1. 00 |
| 15 porcelain evaporating dishes, 4-ounce..... | 3. 75 |
| 8 crucibles, porcelain, No. 1..... | 2. 00 |
| 3 mortars and pestles, No. 1..... | .60 |
| 5 funnels, 4-ounce..... | .70 |
| 6 round Hessian crucibles, 8-ounce..... | 1. 60 |
| 28 flasks, glass, assorted ($\frac{1}{4}$ -pint, \$1.60; $\frac{1}{2}$ -pint, \$1.04, and quart, \$1.20).... | 3. 84 |
| 4 dozen perforated rubber stoppers..... | 6. 00 |
| 4 dozen cork stoppers..... | .20 |
| 2 dozen watch glasses..... | .50 |
| 14 files..... | 1. 00 |
| 1 pair shears..... | 1. 25 |

| | |
|---|----------|
| 25 pounds glass tubing, $\frac{1}{4}$ to 1 inch diameter..... | \$12. 50 |
| 2 burettes, 50 cubic centimeters in tenths..... | 1. 40 |
| 4 pipettes, 1.50 cubic centimeters, 1.25 cubic centimeters, 2.10 cubic centimeters..... | . 85 |
| 2 chemical thermometers, 200 centimeters..... | 2. 60 |
| 2 test tube racks..... | 1. 20 |
| 4 funnels, 2-ounce glass..... | . 40 |
| 1 dialyzing apparatus..... | 1. 50 |
| 9 glass cylinders on foot 12 by 4..... | 11. 25 |
| 1 glass spiral condenser and iron stand..... | 1. 25 |
| 1 air pump, 4-bell jars..... | 40. 00 |
| 3 spectroscopic charts..... | 3. 00 |
| 1 spectroscope..... | 35. 00 |
| 1 aspirator..... | 1. 25 |
| 1 oxyhydrogen blowpipe..... | 5. 00 |
| 6 U tubes..... | . 96 |
| 1 pyrometer..... | 2. 50 |
| 6 dozen 8-inch test tubes, side neck..... | 10. 40 |
| 1 Crooke's radiometer..... | 2. 50 |
| 6 iron tripods..... | 1. 50 |
| 4 iron triangles..... | 2. 40 |
| 1 set capillary tubes..... | . 60 |
| 1 set collision balls..... | 3. 00 |
| 3 charts (elements arranged in periodic system, Mendelejeff)..... | 3. 75 |
| 1 apparatus for decomposing NH_3 and HC_1 | 4. 00 |
| 1 apparatus for demonstrating union of O and H..... | 10. 00 |
| 1 set equilibrium tubes..... | 2. 00 |
| 2 Leyden jars..... | 3. 00 |
| 1 galvanometer..... | 3. 25 |
| 2 electro-magnets..... | 5. 25 |
| 1 gold-leaf letrometer..... | 1. 25 |
| 2 concave mirrors..... | 6. 00 |
| 1 organ pipe and sounder..... | 3. 75 |
| 1 Ruhmkorf coil..... | 5. 00 |
| 2 horseshoe magnets..... | 1. 00 |
| 1 bar magnet..... | . 35 |
| 1 hydrostatic balance..... | 12. 00 |
| 1 prescription balance..... | 16. 00 |
| 2 sets metric weights (1 milligram to 100 grams)..... | 9. 00 |
| 1 sounding fork..... | . 50 |
| 1 whirling table..... | 4. 75 |
| 1 whirling ring..... | 1. 35 |
| 1 gyroscope..... | 2. 25 |
| 5 Giesler tubes..... | 3. 00 |
| 1 Nicholson hydrometer..... | 3. 75 |
| 3 atom models (Eilcart's)..... | 17. 00 |
| 1 10-gallon oxygen tank..... | 10. 00 |
| 2 pulse glasses..... | . 40 |
| 1 water hammer..... | 1. 00 |
| 1 Ritchie gravity block..... | . 50 |
| 1 vacuum tube (3 feet)..... | 1. 50 |
| 3 vacuum cups..... | 7. 50 |
| 1 apparatus for showing equilibrium of liquids..... | 3. 00 |
| 1 Cartesian diver and apparatus..... | . 25 |
| 2 pneumatic syringes..... | 1. 75 |
| 1 electric bomb..... | . 50 |
| 1 sonometer..... | 5. 00 |
| 1 apparatus to show pressure and percussion..... | 1. 50 |
| 12 nessler tubes quick..... | 6. 00 |
| 6 chlor. cal. tubes..... | . 96 |
| 5 pounds barometer tubes..... | 3. 00 |
| 12 thistle tubes, 12-inch..... | 1. 20 |
| 1 separator, 120 cubic centimeters..... | . 50 |
| 1 projecting lantern, oxyhydrogen..... | 50. 00 |
| 1 electric apparatus, frictional Toepler-Holtz..... | 20. 00 |
| 2 dry-cell batteries..... | 1. 40 |
| 1 dipping battery..... | 16. 00 |

| | |
|---|------------|
| 3 blowpipes | \$0. 60 |
| 90 bottles chemical reagent..... | 13. 70 |
| Pharmaceutical laboratory contains, ready for use: | |
| 246 bottles, 5 pints to $\frac{1}{4}$ pint volumetric solution and reagents | 40. 00 |
| Microscopic cabinet contains, ready for use: | |
| 27 microscopes..... | 766. 00 |
| 60 containers with drugs and foodstuffs for examination microscopically... | 10. 00 |
| 1 ream drawing paper..... | 1. 25 |
| 60 dissecting needles..... | 1. 50 |
| 3 dozen forceps, steel..... | 5. 40 |
| 80 packages (100 each) white filters..... | 19. 20 |
| 1 ream Japanese tissue (lens) paper..... | 1. 50 |
| 1,000 slides..... | 6. 00 |
| 16-ounce glass covers..... | 11. 00 |
| 1 analyzer..... | 9. 90 |
| 1 polarizer..... | 8. 10 |
| 10 Abbe condensers with Iris diaphragm..... | 68. 85 |
| 7 extra double nose pieces..... | 26. 14 |
| 3 micrometer disks..... | 3. 38 |
| Library contains 2,500 bound volumes, worth about, if sold at forced sale.. | 500. 00 |
| Desks and shelving for work in pharmaceutical laboratory..... | 400. 00 |
| 1 set plain botanical charts..... | 15. 00 |
| 1 set botanical charts, hand painted..... | 90. 00 |
| 1 set lithographed botanical plates in colors..... | 39. 00 |
| 1 set charts with chemical symbols and chemical reactions..... | 75. 00 |
| | <hr/> |
| | 4, 628. 41 |
| | <hr/> |

Students' session, 1909-10:

| | |
|--------------------------------|----|
| Chemical laboratory..... | 82 |
| Pharmaceutical laboratory..... | 80 |
| Microscopic laboratory..... | 8 |

RECAPITULATION.

| | |
|---|--------------|
| Total for chemical laboratory..... | \$2, 353. 12 |
| Total for other items..... | 4, 628. 41 |
| Value of real estate and buildings (on which a trust of \$1,000 is still due).. | 20, 000. 00 |
| | <hr/> |
| | 26, 981. 53 |

EXHIBIT E.

COLLEGE OF ARTS AND SCIENCES.

MAY 6, 1910.

MY DEAR PRESIDENT NEEDHAM: In answer to your request of the 29th instant, I would furnish the following report concerning the rooms and accommodations assigned to students of the college of arts and sciences in the main building, corner Fifteenth and H streets.

The main building consists of a basement and three stories and a tower containing two rooms. The basement is occupied by the business offices, by laboratories of the college of engineering, including also the physical laboratory, which will be reported elsewhere. In addition, there are in the basement laboratories of the department of chemistry, a janitor's room, a lavatory, and a considerable space occupied by the heating plant. Nothing in the basement comes properly within the assignment or use of the college of arts and sciences, except the chemical laboratories, which, as they are used jointly by different departments of the university, will be elsewhere reported.

The first story of the main building is occupied by the president's office and by the library of arts and sciences. These do not come within the scope of this report. In addition, in the first story also, are two halls, of size and capacity as follows:

| Name. | Designation. | Size. | Capacity. |
|----------------------|--------------------|----------------------------------|-----------|
| University hall..... | Assembly hall..... | 60 feet by 45 feet 6 inches..... | 450 |
| West hall..... | Lecture hall..... | 45 feet 6 inches by 22 feet..... | 80 |

The second story has class rooms and offices as follows:

| Room No. | Designation. | Size. | Capacity. |
|----------|---|---|-----------|
| 14 | Class room | 25 feet by 24 feet | 40 |
| 15 |do..... | 26 feet by 21 feet 2 inches | 40 |
| 16 |do..... | 20 feet 3 inches by 17 feet 9 inches | 35 |
| 17 |do..... | 25 feet 10 inches by 20 feet 8 inches | 35 |
| 18 |do..... | 25 feet 2 inches by 23 feet 11 inches | 50 |
| 19 | Women's cloakroom | 25 feet 2 inches by 12 feet 8 inches | |
| 20 | Gallery of university hall | | |
| 21 | Office of Professor Carroll | 12 feet by 18 feet 6 inches | |
| 22, 23 | Office of dean of college of arts and sciences | 11 feet by 18 feet 6 inches | |
| 24 | Office of dean of women of college of arts and sciences | 10 feet 3 inches by 18 feet 6 inches | |

The third story has class rooms and laboratories as follows:

| Room No. | Designation. | Size. | Capacity. |
|----------|-------------------------------|---|-----------|
| 25 | Class room | 25 feet by 24 feet | 50 |
| 26 | Class room | 30 feet 10 inches by 26 feet 3 inches | 70 |
| 27 | Zoological laboratory | 31 feet 6 inches by 26 feet 3 inches | (a) |
| 28 | Class room | 25 feet 2 inches by 23 feet 11 inches | 50 |
| 29 | Men's coat room | 25 feet 2 inches by 12 feet 8 inches | |
| 31 | Chemical lecture hall | 35 by 46 feet | (b) |
| 32 | Office of Doctor Harlan | 17 feet 6 inches by 11 feet | |
| 33 | Geological laboratory | 46 feet 9 inches by 24 feet | (a) |

^a Special report attached.

^b Reported elsewhere.

The wing of the university building running back in the rear of the law building is occupied by the department of chemistry, reports of which are elsewhere given.

In the tower of the building there is a room the full size of the tower, assigned for the use of the Young Men's Christian Association of the university. Above this room in the top of the tower is another smaller room assigned for the use of the student publications as editorial offices.

I forward as a part of this report the report of Professor Merrill for the geological laboratory, and the report of Professor Bartsch for the zoological, botanical, and biological laboratory. The facilities in chemistry and physics, utilized largely by the college of arts and sciences, are separately reported elsewhere.

Very respectfully,

WM. A. WILBUR, *Dean.*

Schedule of equipment.

Zoological, botanical, and biological laboratory.

| | |
|--|-------|
| 7 microscopes, which have a value of about \$40 each | \$280 |
| 1 microtome, valued at \$30 | 30 |
| 1 paraffin bath, \$20 | 20 |
| 1 Arnold steam sterilizer, about \$25 | 25 |
| 1 paraffin oven, \$20 | 20 |
| Glassware, about \$70 | 70 |
| Reagents, about \$30 | 30 |
| Insect case and insects, about \$150 | 150 |

625

In addition to the above we have my personal collection (Professor Bartsch) of birds, about 1,000, and Mr. Palmer's collection of birds, about 2,500, which have been used for our class work in ornithology. These, however, are private collections and have simply been loaned for use.

The number of students enrolled this year in zoology are: 12 in "zoology 1," 8 in ornithology, and 3 doing post-graduate work. The number which can be accommodated in the room for recitation is about 30; for laboratory work, about 16.

Geology.

About one-half of room 33 is used for laboratory purposes, say a space 25 by 50 feet, or an equivalent of 1,250 square feet. The equipment for the room consists of the following:

| | |
|---|--------|
| 1 lantern..... | \$125 |
| 1 wall case with 3 maps..... | 20 |
| 650 lantern slides, at 40 cents..... | 260 |
| 1 roller map case of the United States..... | 12 |
| 23 sets of blowpipe apparatus, at \$5..... | 115 |
| Collections of rocks and minerals..... | 250 |
| Collections of fossils..... | 150 |
| Chemicals on hand..... | 25 |
| 5 cases for books and specimens, at \$20..... | 100 |
| 2 benches with gas connections, at \$25..... | 50 |
| | <hr/> |
| | 1, 107 |

The number of students enrolled for the work in the laboratory this year was 23, although there is really room for but 20.

Chemistry.

MAY 6, 1910.

MR. CHARLES W. NEEDHAM,
President George Washington University.

DEAR SIR: In obedience to your instructions, I have the honor to submit herewith a "Report on conditions and resources in chemistry at George Washington University, May, 1910." As there are about 10,000 different items, it was of course, a physical impossibility to inventory all of them separately in the time at command. I have, therefore, divided them into 406 different classes, and taken for their values, where possible, an average value from the recent trade catalogues, allowing also for depreciation, and I believe that the estimate which I give is a conservative one.

Yours, very truly,

CHARLES E. MUNROE.

Report on conditions and resources in chemistry at George Washington University, May, 1910.

Rooms used in teaching:

Main building, upper floor: Lecture room, 46 feet by 35 feet; preparation room, 30 feet by 14 feet; research laboratory, 33 feet by 15 feet 4 inches.

Main building, second floor: Organic laboratory, 40 feet by 30 feet 10 inches; electro-chemical laboratory, 35 feet 3 inches by 12 feet 4 inches; balance room, 11 feet 9 inches by 9 feet; research laboratory, 17 feet 7 inches by 14 feet 5 inches; stock room, 13 feet by 9 feet 4 inches.

Main building, first floor: General laboratory, 47 feet by 33 feet (with stock room); preparation room, 17 feet 5 inches by 14 feet 5 inches; balance room, 13 feet by 9 feet 4 inches.

Main building, basement: Assay laboratory (with balance room), 59 feet 10 inches by 11 feet; preparation room, 17 feet by 15 feet 4 inches; store room, 35 feet 10 inches by 15 feet 4 inches.

Medical building: Lecture room, 42 feet 3 inches by 52 feet; laboratory, 51 feet by 48 feet 4 inches; balance room, 21 feet 9 inches by 15 feet 5 inches; stock room, 21 feet 9 inches by 15 feet 5 inches.

Capacities:

| | Persons. |
|-------------------------------------|----------|
| Lecture room, main building..... | 150 |
| Lecture room, medical building..... | 300 |
| Laboratories, main building..... | 122 |
| Laboratories, medical building..... | 368 |

Number of students enrolled for chemistry in the various courses for 1909-10.

| Students in chemical lectures and recitations: | Students. |
|--|-----------|
| Course 1..... | 105 |
| Course 6..... | 41 |
| Course 23..... | 25 |
| Course 24..... | 11 |
| Course 28..... | 33 |
| Course 29..... | 22 |
| Course 30..... | 22 |
| Total..... | 259 |

| Students in chemical laboratories: | |
|------------------------------------|-----|
| Course 2..... | 27 |
| Course 3..... | 16 |
| Course 4..... | 1 |
| Course 7..... | 32 |
| Course 20..... | 24 |
| Course 21..... | 10 |
| Course 25..... | 4 |
| Course 28..... | 33 |
| Course 29..... | 22 |
| Course 30..... | 22 |
| Course 31..... | 16 |
| Medical, first year..... | 9 |
| Dental, first year..... | 9 |
| Veterinary, first year..... | 16 |
| Graduate courses..... | 9 |
| Total..... | 250 |
| Grand total..... | 509 |

Apparatus, supplies, and equipment for chemistry in department of arts and sciences.

Inorganic and organic chemistry:

Chemicals—

| | |
|---|-----------|
| 100 pounds acids, organic, at \$1..... | \$100. 00 |
| 100 pounds acids, hydrochloric CP, at 15 cents..... | 15. 00 |
| 75 pounds acids, hydrochloric Com., at 8 cents per carboy..... | 7. 29 |
| 96 pounds acids, nitric, C. P., at 20 cents..... | 19. 20 |
| 600 pounds acids, nitric, Com., at 10 cents per carboy..... | 67. 50 |
| 150 pounds acids, sulphuric, C. P., at 10 cents per carboy..... | 16. 25 |
| 200 pounds acids, sulphuric, Com., at 1 cent per carboy..... | 4. 50 |
| 10 pounds acids, morganic, at 30 cents..... | 3. 00 |
| 10 gallons alcohols, ectyl., at 20 cents..... | 2. 00 |
| 50 pounds alcohols, other, at 50 cents..... | 25. 00 |
| 200 pounds aluminum and aluminum compounds, at 10 cents..... | 20. 00 |
| 90 pounds ammonia water, C. P., at 15 cents per carboy..... | 14. 75 |
| 90 pounds ammonia water, Com., at 10 cents per carboy..... | 10. 25 |
| 50 pounds ammonium compounds, at 20 cents..... | 10. 00 |
| 5 pounds antimony and antimony compounds, at 50 cents..... | 2. 50 |
| 5 pounds arsenic and arsenic compounds, at 25 cents..... | 1. 25 |
| 30 pounds barium and barium compounds, at \$1..... | 30. 00 |
| 10 pounds bismuth and bismuth compounds, at \$2..... | 20. 00 |
| 5 pounds boron and its compounds, at 60 cents..... | 3. 00 |
| 5 pounds bromine, at 50 cents..... | 2. 50 |
| 5 pounds cadmium, its alloys and compounds, at \$1..... | 5. 00 |
| 1 ounce carsum compounds, at \$2..... | 2. 00 |
| 20 pounds calcium compounds, at 25 cents..... | 5. 00 |
| 10 pounds carbon, at 10 cents..... | 1. 00 |
| 2 ounces cerium compounds, at \$1..... | 2. 00 |
| 5 pounds chromium compounds, at \$1..... | 5. 00 |
| 10 pounds cobalt and its compounds, at \$2..... | 10. 00 |
| 25 pounds copper and its compounds, at 75 cents..... | 8. 34 |
| $\frac{1}{4}$ ounce gold compounds, at \$16..... | 8. 00 |

Inorganic and organic chemistry—Continued.

Chemicals—Continued.

| | |
|--|---------|
| 2 pounds iodine, at \$3..... | \$6. 00 |
| 25 pounds iron and its compounds, at 50 cents..... | 12. 50 |
| 25 pounds lead and its compounds, at 50 cents..... | 12. 50 |
| 4 ounces lithium compounds, at \$1.50..... | 6. 00 |
| 20 pounds magnesium and its compounds, at 60 cents..... | 12. 00 |
| 30 pounds manganese and its compounds, at 50 cents..... | 15. 00 |
| 100 pounds mercury, at \$1.20..... | 120. 00 |
| 5 pounds molybdenum compounds, at \$2..... | 10. 00 |
| 10 pounds nickel and its compounds, at 75 cents..... | 7. 50 |
| 1 ounce palladium compounds, at \$5..... | 5. 00 |
| 35 ounces phosphorus and its compounds, at \$1.50..... | 52. 50 |
| 500 grains platinum and its compounds, at \$1..... | 500. 00 |
| 100 pounds potassium and its compounds, at \$1..... | 100. 00 |
| $\frac{1}{8}$ ounce rubidium compounds, at \$6..... | . 75 |
| $\frac{1}{8}$ ounce selenium, at \$5..... | . 62 |
| 2 pounds silicon and its compounds, at \$2..... | 4. 00 |
| $1\frac{1}{2}$ pounds silver and its compounds, at 80 cents..... | 1. 20 |
| 150 pounds sodium and its compounds, at 20 cents..... | 30. 00 |
| 8 pounds strontium compounds, at 50 cents..... | 4. 00 |
| 10 pounds sulphur, at 10 cents..... | 1. 00 |
| 2 pounds tellurium and its compounds, at \$2..... | 4. 00 |
| $\frac{3}{8}$ ounce thorium compounds, at \$1..... | . 50 |
| 10 pounds tin and its compounds, at 40 cents..... | 4. 00 |
| 1 ounce titanium compounds, at \$2..... | 2. 00 |
| 2 pounds tungsten compounds, at \$1..... | 2. 00 |
| 5 pounds uranium compounds, at \$3..... | 15. 00 |
| 1 pound vanadium compounds, at \$3..... | 3. 00 |
| 25 pounds zinc and its compounds, at 30 cents..... | 7. 50 |
| 1 ounce zirconium compounds, at \$2..... | 2. 00 |
| Chemical exhibits and cases..... | 600. 00 |
| Collection of dyestuffs and coloring matters..... | 500. 00 |
| Organic chemicals..... | 250. 00 |

Apparatus—

| | |
|---|---------|
| 5 acid dishes, at \$1..... | 5. 00 |
| 10 crocks and pots, at 20 cents..... | 2. 00 |
| 12 adapters, at 30 cents..... | 3. 60 |
| Anvils, vises, hammers, and tools..... | 15. 00 |
| Asbestos board and neats..... | 4. 00 |
| 8 balances, analytical, at \$60..... | 480. 00 |
| 12 balances, common, at \$8..... | 96. 00 |
| 30 balances, horn and brass, at \$1.75..... | 52. 50 |
| 1 balance, Westphal's..... | 15. 00 |
| 1 barometer..... | 14. 00 |
| 1 barometer, aneroid..... | 7. 50 |
| 10 batteries, at 25 cents..... | 2. 50 |
| 900 beakers, at 20 cents..... | 180. 00 |
| 6 bell glasses, at \$1..... | 6. 00 |
| 6 bellows, at \$6..... | 36. 00 |
| 6 binding posts, at 10 cents..... | . 60 |
| Blast apparatus..... | 250. 00 |
| 12 blast lamps, at \$3..... | 36. 00 |
| 12 blast lamps for glass working..... | 10. 00 |
| 50 blowpipes, at 15 cents..... | 7. 50 |
| 144 dozen bottles, at \$1.44..... | 207. 36 |
| 6 bottles, specific gravity, at \$1..... | 6. 00 |
| 36 bottles, weighing, at 40 cents..... | 14. 40 |
| 50 brushes, test tubes, etc., at 5 cents..... | 2. 50 |
| 12 bulbs, rubber, at 10 cents..... | 1. 20 |
| 50 bulb tubes, at 20 cents..... | 10. 00 |
| 36 burettes, at \$1.50..... | 54. 00 |
| 150 burners, Bunsen, at 25 cents..... | 37. 50 |
| 6 burners, spinal forcas, at \$2..... | 12. 00 |
| 12 calorimeters, at \$1.50..... | 18. 00 |
| 1 calorimeter, Bunsen..... | 1. 25 |
| 2 alkalimeters, at \$1.70..... | 3. 40 |

Inorganic and organic chemistry—Continued.

Apparatus—Continued.

| | |
|--|----------|
| 1 alkalimeter, Scheibler's | \$30. 00 |
| 1 carboy inclinor | 5. 00 |
| 51 casseroles, porcelain, at 90 cents | 45. 90 |
| 40 casseroles, agate ware, at 25 cents | 10. 00 |
| 1 centrifuge | 35. 00 |
| 48 clamps, at 60 cents | 28. 80 |
| 216 clamps, pinchcocks, at 20 cents | 43. 40 |
| 105 cobalt glass, at 6 cents | 6. 30 |
| 1 color comparator | 15. 00 |
| 1 colormeter | 80. 00 |
| 3 combustion furnaces, at \$25 | 75. 00 |
| 48 condensers, at \$1 | 48. 00 |
| 2 condensers for SO ₂ , at \$2 | 4. 00 |
| 65 gr. corks, long, at 50 cents | 32. 50 |
| 9.5 gr. corks, flat, at \$2 | 19. 00 |
| 4 cork borers, at \$1.50 | 6. 00 |
| 4 cork presses, at 65 cents | 2. 60 |
| 72 crucibles, porcelain, at 25 cents | 18. 00 |
| 36 crucibles, gooches, at 60 cents | 21. 60 |
| 120 crucible tongs, at 30 cents | 36. 00 |
| 2 crushers, at \$25 | 50. 00 |
| 6 cylinders, open and closed, at 25 cents | 1. 50 |
| 100 cylinders, open grad., at \$1 | 100. 00 |
| 36 desiccators, at \$1.60 | 57. 60 |
| 250 dishes, evaporating, at 45 cents | 112. 50 |
| 1 distilling apparatus | 25. 00 |
| 1 drying apparatus | 12. 00 |
| 5 drying ovens, at \$6.50 | 32. 50 |
| 3 drying ovens, double walled, at \$12 | 36. 00 |
| 1 drying oven, V. Meyer's | 12. 00 |
| 48 drying tubes, at 30 cents | 14. 40 |
| 2 extraction apparatus, at \$1 | 2. 00 |
| 3 extraction apparatus, Wiley's, at \$5 | 15. 00 |
| 1 extraction apparatus, cartridges | 2. 00 |
| 36 files, at 10 cents | 3. 60 |
| 1 filter case | 4. 00 |
| 1 ream filter paper, uncut qual., at \$4.80 | 4. 80 |
| 353 pk. filter paper, cut qual., at 10 cents | 35. 30 |
| 30 pk. filter paper, cut quan., at \$1 | 30. 00 |
| 18 filter pumps, at \$1.75 | 30. 50 |
| 24 filter tubes, at 25 cents | 6. 00 |
| 90 filter stands, at 60 cents | 54. 00 |
| Filtering apparatus | 4. 00 |
| 76 flasks, assay, at 20 cents | 15. 20 |
| 67 flasks, balloon, at 60 cents | 40. 20 |
| 806 flasks, Erlenmeyer, at 20 cents | 161. 20 |
| 60 flat-bottom flasks, at 12 cents | 7. 20 |
| 79 flasks, distillery, at 30 cents | 23. 70 |
| 66 flasks, graduated, at 60 cents | 39. 60 |
| 25 forceps, at 20 cents | 5. 00 |
| 398 funnels, ordinary, at 15 cents | 59. 70 |
| 20 funnels, separating, at \$1.50 | 30. 00 |
| 60 funnels, thistle, at 10 cents | 6. 00 |
| Furnace bomb | 41. 00 |
| Furnace bomb, old | 10. 00 |
| Gas analy. app., Hempel's | 35. 00 |
| Generator, Parson's | 25. 00 |
| 8 generators, Kipp's, at \$4.50 | 36. 00 |
| 1 generator, McCoy's, at \$8 | 8. 00 |
| 3 generators, other forms, at \$1 | 3. 00 |
| 5 gas measuring tables, at \$1 | 5. 00 |
| 2 gas regulators, B. and K., at \$3.50 | 7. 00 |
| 3 gas washing bottles, at \$1.50 | 4. 50 |
| 181 pounds glass tubing, at 50 cents | 90. 50 |
| 15 pounds glass rod, at 50 cents | 7. 50 |

Inorganic and organic chemistry—Continued.

Apparatus—Continued.

| | |
|---|--------|
| 6 hydrometers, at \$1..... | \$6.00 |
| 80 graduates, at 60 cents..... | 48.00 |
| 6 pairs carbon tubes, at \$1..... | 6.00 |
| 5 dozen jars, at \$1.80..... | 9.00 |
| Hofmann apparatus..... | 24.75 |
| Lecture apparatus..... | 500.00 |
| 18 magnets, at 10 cents..... | 1.80 |
| 5 magnifiers, at 35 cents..... | 1.75 |
| 30 measures, sticks and folding, at 45 cents..... | 13.50 |
| Milk tester, Babcock..... | 15.50 |
| 5 mortars, agate, at \$5..... | 15.00 |
| 100 mortars, porcelain, at 35 cents..... | 35.00 |
| 2 mortars, iron, at \$3.60..... | 7.20 |
| 3 nitrometers, at \$5..... | 15.00 |
| Oil tester, New York..... | 7.50 |
| Oil tester, Tag..... | 12.00 |
| Ozone apparatus..... | 3.50 |
| 40 pipettes, at 50 cents..... | 20.00 |
| 4 pliers, at 60 cents..... | 2.40 |
| Polariscope, new..... | 27.00 |
| Polariscope, old..... | 25.00 |
| 12 potash bulbs, at \$1..... | 12.00 |
| 24 receivers, at 20 cents..... | 5.80 |
| 150 retorts, glass, at 30 cents..... | 45.00 |
| 1 mercury retort..... | 2.50 |
| 12 retorts, iron, at 50 cents..... | 6.00 |
| 411 feet rubber tubing, at 12 cents..... | 49.32 |
| 14 pounds rubber stoppers, at \$2..... | 28.00 |
| Reagents and bottles..... | 200.00 |
| 79 sand baths and plates, at 10 cents..... | 7.90 |
| Sieves..... | 9.00 |
| 40 spatulas, horn, force and Fe, at 15 cents..... | 6.00 |
| Spectroscopes, large..... | 140.00 |
| Spectroscopes, medium..... | 60.00 |
| Spectroscopes, pocket..... | 8.00 |
| 6 stopcocks, brass and glass, at \$1..... | 6.00 |
| 12 supports, burettes, at \$1..... | 12.00 |
| Support, pipettes..... | 2.50 |
| Support, retorts..... | 1.00 |
| 80 supports, test tubes, at 60 cents..... | 48.00 |
| 6 supports, tables, at \$1.25..... | 7.50 |
| 19 gross test tubes, at \$3..... | 57.00 |
| 2 thermometers, Beekman, at \$9..... | 18.00 |
| 84 thermometers, general, at \$1.20..... | 100.80 |
| Testing outfit for dyestuffs..... | 25.00 |
| 24 tubes, ignition, at 10 cents..... | 2.40 |
| 15 tripods, at 30 cents..... | 4.50 |
| 12 urinometers, Doremas, at 85 cents..... | 10.20 |
| Vapor density apparatus..... | 10.00 |
| Water-testing apparatus..... | 25.00 |
| 24 water baths, at \$2..... | 48.00 |
| 100 weights, ordinary, \$1.25..... | 125.00 |
| 8 weights, analytical, at \$8..... | 64.00 |
| 473 watch glasses, at 5 cents..... | 23.65 |
| 96 wash bottles, at 25 cents..... | 24.00 |
| 1 jones reductor..... | 2.50 |
| 1 carbon crucible, E and A..... | 50.00 |
| Sundries not enumerated..... | 500.00 |

8,518.18

Equipment—

| | |
|--------------------------------|--------|
| 150 chairs, at \$1 each..... | 150.00 |
| Lecture table..... | 100.00 |
| 6 cases, with glass doors..... | 225.00 |
| 14 sets of shelves..... | 140.00 |

Inorganic and organic chemistry—Continued.

Equipment—Continued.

| | |
|-----------------------------------|------------|
| 2 balance shelves..... | \$15. 00 |
| 12 tables..... | 60. 00 |
| 13 laboratory working tables..... | 260. 00 |
| 8 laboratory hoods..... | 80. 00 |
| | <hr/> |
| Apparatus and supplies..... | 1, 010. 00 |
| | <hr/> |
| Total..... | 8, 518. 18 |
| | <hr/> |
| | <hr/> |
| | 9, 528. 18 |

Assaying:

Apparatus and supplies—

| | |
|---|---------|
| 1 acid dish, porcelain, 5 $\frac{1}{4}$ inches..... | 1. 00 |
| 1 air pump..... | 10. 00 |
| 2 annealing cups..... | . 20 |
| 2 anvils..... | 7. 00 |
| Abestos board..... | 1. 50 |
| 1 balance, analytical..... | 65. 00 |
| 3 balances, assay..... | 195. 00 |
| 2 balances, for pulp..... | 70. 00 |
| 1 balance, for pulp..... | 8. 00 |
| 2 sets weights..... | 8. 00 |
| 1 set assay ton weights..... | 6. 00 |
| 3 dozen beakers, glass..... | 5. 40 |
| 7 beakers, porcelain..... | 5. 25 |
| 1 bell glass, 11 inches..... | 4. 50 |
| 1 glass plate, for bell glass..... | 1. 00 |
| 1 bellows, Fletcher's, 9 inches..... | 5. 00 |
| 1 blast lamp, Bunsen's..... | 3. 60 |
| 1 blast lamp, Fletcher's..... | 3. 50 |
| 1 blow pipe, brass, plain, 8 inches..... | . 08 |
| 3 bottles reagent, 16 ounces..... | 1. 00 |
| 4 bottles reagent, 8 ounces..... | 1. 00 |
| 3 dozen bottles reagent, 4 ounces..... | 6. 75 |
| 8 dozen bottles, as containers..... | 3. 20 |
| 1 bottle, balsam..... | . 35 |
| $\frac{1}{2}$ dozen weighing bottles..... | 1. 00 |
| 1 dozen bottle caps..... | . 60 |
| $\frac{1}{4}$ dozen brushes for test tubes..... | . 19 |
| $\frac{1}{4}$ dozen brushes, camel's hair..... | . 05 |
| 1 brush, camel's hair, 1 inch..... | . 20 |
| $\frac{1}{2}$ dozen burettes..... | 9. 00 |
| 1 burner, alcohol lamp..... | . 35 |
| $\frac{1}{2}$ dozen burners, Bunsen's..... | 1. 50 |
| 1 dozen burners, Bunsen's, porcelain..... | 3. 00 |
| 1 dozen burners, Fletcher's..... | 5. 00 |
| 1 aekalimeter, Rohrbeck's, for CO ₂ | 1. 70 |
| 1 centrifuge..... | 20. 00 |
| 2 clamps, brass, for test tubes..... | . 60 |
| $\frac{1}{2}$ dozen clamps, iron..... | 3. 00 |
| 2 clamps, spring..... | . 30 |
| 1 combustion boat..... | . 30 |
| 2 condensers..... | 2. 50 |
| 1 $\frac{1}{2}$ dozens porcelain crucibles..... | 2. 40 |
| 4 perforated crucibles, porcelain..... | 1. 40 |
| 1 crucible, Rose's..... | . 50 |
| 1 crucible, plumbago..... | . 35 |
| 3 crucibles, plumbago, 13-inch, with covers..... | 3. 00 |
| 2 $\frac{1}{2}$ gross Battersea crucibles and covers..... | 40. 00 |
| 2 dozen Battersea crucibles, small..... | . 60 |
| 2 dozen crucibles, Denver E..... | 1. 40 |
| 1 crucible, Skidmore's..... | 2. 00 |
| 1 pair crucible tongs..... | . 75 |
| 2 crucible tongs..... | 3. 50 |
| 1 crusher and rubber..... | 12. 00 |

Assaying—Continued.

Apparatus and supplies—Continued.

| | |
|--|---------|
| 1 gross capels..... | \$4. 00 |
| 1 capel mold, 1½..... | 3. 00 |
| 4 capel tongs..... | 4. 00 |
| 1 capel tray, holding 16 capels..... | 1. 25 |
| 1 cylinder, graduated..... | . 35 |
| 1 cylinder, graduated, 250 cubic centimeters, double..... | . 90 |
| 1 cylinder, graduated, 200 cubic centimeters, double..... | . 80 |
| 2 cylinders, graduated, 1,000 cubic centimeters, double..... | 2. 35 |
| 4 desiccators, 5-inch..... | 4. 00 |
| 1 dozen dishes, evaporating..... | 2. 25 |
| 1 drying oven, single wall..... | 6. 50 |
| 1 drying oven, double wall..... | 7. 50 |
| 1 drying tube, 16-inch..... | 1. 10 |
| 3 drying tubes for CaCl₂..... | . 36 |
| 1 electrolytic apparatus..... | 40. 00 |
| 1 extraction apparatus, Wiley..... | 5. 00 |
| Filter paper..... | 2. 50 |
| 1 aspirator..... | 1. 75 |
| 1 filtering apparatus, Witt..... | 4. 50 |
| 3½ dozens flasks, assorted..... | 8. 00 |
| 1 flask, filtering..... | . 50 |
| 11 flasks, volumetric, 25 cubic centimeters to 1 liter..... | 4. 00 |
| 3 dozen funnels, glass..... | 3. 60 |
| 1 funnel, Buchner, 4-inch..... | 1. 25 |
| 5 funnels, tubes, thistle..... | . 30 |
| 1 furnace, assay..... | 20. 00 |
| 1 furnace, assay, combination gas..... | 20. 00 |
| 2 furnaces, in battery..... | 35. 00 |
| 4 fire brick fittings for furnace..... | 2. 00 |
| 1 generator, Kipp, ½ pint..... | 3. 00 |
| 20 pounds glass tubes and rods..... | 10. 00 |
| 3 goldpans, Miner's washing pans..... | 1. 50 |
| 4 graduates, 1 dram to 4 ounces..... | . 90 |
| 3 hammers..... | . 75 |
| 2 hydrometers..... | 1. 50 |
| 1 reduction tube, funnel top..... | 2. 50 |
| 1 magnifying glass..... | . 60 |
| 1 measure, folding..... | . 45 |
| 1 mortar, iron..... | 1. 65 |
| 1 mortar, Buck's, for amalgamating..... | 8. 00 |
| 1 mortar, glass..... | . 45 |
| 3 mortars, porcelain..... | 1. 65 |
| 5 molds, pouring..... | 5. 00 |
| 4 dozen muffles..... | 38. 40 |
| 1 set pipettes..... | 1. 50 |
| 1 plate, for color reaction..... | . 65 |
| 1 potash bulb apparatus, Geissler..... | 1. 00 |
| 2 scarifier tongs..... | 2. 00 |
| 2 scoops..... | . 70 |
| 1 pair scissors..... | . 75 |
| 1 dozen sieves..... | 10. 00 |
| 13½ gross scorifiers, 2½ inches..... | 14. 70 |
| 13 dozen scorifiers, 4 inches..... | 4. 50 |
| ½ gross roasting dishes..... | 5. 40 |
| 7 spatulas, steel..... | 2. 45 |
| 1 stopcock, 3-way..... | 1. 50 |
| 4 supports, for retorts..... | 1. 40 |
| 3 supports, for burettes..... | 3. 00 |
| 1 support, for funnels, 12 holes..... | 3. 50 |
| 1 support, for 12-test tubes..... | 1. 00 |
| 1 support, for 36-test tubes, iron..... | . 40 |
| 1 syphon, glass, Sedlacek's, 20 inches..... | 1. 50 |
| 5 dozen test tubes..... | 1. 50 |
| 3 thermometers..... | 4. 20 |
| 3 tripods..... | 1. 20 |

Assaying—Continued.

Apparatus and supplies—Continued.

| | |
|---|--------|
| 1 wash bottle..... | \$0.75 |
| 1 water bath, constant level..... | 5.00 |
| 2 water baths, round..... | 2.00 |
| 1 small ore crusher..... | 10.00 |
| 2 large ore crushers..... | 100.00 |
| 1 leather-faced mallet..... | .25 |
| 1 $\frac{1}{4}$ -horsepower electric motor..... | 6.00 |
| 1 rotary blower..... | 5.00 |
| 1 electric lathe, with attachments..... | 35.00 |
| 1 muffle hoe..... | .25 |
| 2 4-gallon slop jars..... | 1.50 |
| 4 2-gallon slop jars..... | 2.00 |
| 1 6-Bunson parting flask support..... | 3.00 |
| 2 3-jet French glass-blowers' lamp..... | 9.00 |
| 1 dozen pipstem triangles..... | .50 |
| 2 stirrers for roasting..... | .50 |
| 1 small beam balance..... | 1.00 |
| 1 knife..... | .25 |
| 1 gross stirring rods..... | 2.50 |
| 5 dozen watch glasses..... | 3.00 |
| 2 demijohns..... | 1.00 |
| 3 Kjeldahl flasks..... | .75 |
| 1 carbon tube..... | .30 |
| 1 set glass-blowers' tools..... | 5.00 |
| 12 cup button holder..... | .75 |
| 1 watch-glass holder..... | .10 |
| 1 3-inch agate mortar and pestle..... | 5.00 |
| 3 endrometers..... | 1.50 |
| 1 tabulated bell jar..... | .75 |
| 50 pounds solid reagents..... | 20.00 |
| $\frac{1}{4}$ barrel stone ash..... | 5.00 |
| 1 keg silica..... | 3.00 |
| 1 keg sodium bicarbonate..... | 3.00 |
| 200 pounds litharge..... | 24.00 |
| 100 pounds test lead..... | 25.00 |
| $\frac{1}{2}$ bushel borax..... | 3.00 |
| 10 $2\frac{1}{2}$ -liter stock solutions..... | 2.00 |
| 3 blue glasses..... | .15 |

1, 143.28

Equipment:

| | |
|---------------------------------|-------|
| 6 chairs and stool..... | 6.00 |
| 9 tables..... | 45.00 |
| 5 sets of shelves..... | 25.00 |
| 1 laboratory working table..... | 50.00 |
| 2 hoods..... | 20.00 |

146.00

Apparatus and supplies..... 1, 143.28

Total..... 1, 289.28

Electro-chemistry:

Apparatus and supplies—

| | |
|--|--------|
| 1 Holtzer-Cabot direct-current-alternating-current motor generator, 3 K. P., with starting box, rheostat, etc..... | 200.00 |
| 1 Crocker-Wheeler direct-current-direct-current motor generator, with starting box, rheostat, etc. (property Doctor Chalford) (about)..... | 200.00 |
| 1 Tesla high-frequency high-potential transformer..... | 75.00 |
| 1 Hanzel and Van Winkle generator, 5 horsepower (gift), at No. 2128 Bancroft place (about)..... | 75.00 |
| 1 chemical balance..... | 50.00 |
| 1 rotary pressure pump..... | 20.00 |

Electro-chemistry—Continued.

Apparatus and supplies—Continued.

| | |
|---|---------|
| 1 crucible gas furnace..... | \$15.00 |
| Electric wiring, switches, etc..... | 65.00 |
| Lamp bank and experimental lamps..... | 10.00 |
| 1 electric furnace (gift)..... | 50.00 |
| 2 storage battery exhibits..... | 30.00 |
| Electric storage battery (gift)..... | 32.00 |
| 1 double-felt-lined colorimeter for electro-chemical experiments... | 5.00 |
| Heavy electrical conductors to main feed..... | 60.00 |
| | <hr/> |
| | 887.00 |

Equipment—

| | |
|---|--------|
| 1 instrument case with glass doors..... | 15.00 |
| Partitioning, workbench, and interior fittings (about)..... | 150.00 |
| Window shades..... | 36.00 |
| 2 blackboards..... | 10.00 |
| 5 tables..... | 25.00 |
| 2 pictures (gift)..... | |
| | <hr/> |
| | 236.00 |

| | |
|-----------------------------|--------|
| Apparatus and supplies..... | 887.00 |
|-----------------------------|--------|

| | |
|------------|-----------------------|
| Total..... | <hr/> <hr/> 1, 123.00 |
|------------|-----------------------|

EXHIBIT F.

Teachers' college.

The teachers' college is housed in a four-story building, situated at 1534 I street N. W.

1. First floor: (a) dean's office, 26 by 13½ feet; (b) cloak room, 11½ by 9 feet; (c) library, 20 by 20 feet. Second floor: (a) lecture room, 34 by 20 feet; (b) class room, 19 by 20½ feet. Third floor: (a) class room, 34 by 20 feet; (b) seminar room, 17½ by 10½ feet; (c) office, 24 by 9 feet; (d) dark room, 6½ by 9 feet. Fourth floor: Laboratory, four rooms—(a) workroom, 10 by 27 feet; (b) workroom, 10 by 26 feet; (c) shop, 9 by 19 feet; (d) dark room, 10 by 13½ feet.

2. Second floor: (a) large room, seating capacity, 50; (b) smaller room, seating capacity, 30. Third floor: (a) class room, seating capacity, 30; (b) seminar room, seating capacity, 10.

3. The psychological laboratory (referred to under "1" above) occupies the fourth floor and one room on the third floor of the education building. The size of the rooms is given under "1".

The laboratory equipment consists of the following apparatus, tools, charts, etc.:

| | |
|---|--------|
| 1 model of eye..... | \$3.25 |
| 1 model of ear..... | 3.90 |
| 1 prism..... | .30 |
| 1 set of gray papers..... | .92 |
| 1 set of colored papers..... | 1.98 |
| 1 color mixer..... | 6.00 |
| 1 color mixer (electric)..... | 5.50 |
| 1 colored disk (Nos. 1-15), at 2 cents..... | .33 |
| 1 colored disk (Nos. 1-15), at 4 cents..... | .66 |
| 20 cross-ruled paper, 20 sheets..... | .27 |
| 4 tuning forks, 4, A and C..... | .72 |
| 1 pseudoptics..... | 5.50 |
| 36 stereoscope slides..... | 3.30 |
| 1 stereoscope..... | 1.65 |
| 1 esthesiometer..... | 2.20 |
| 2 telegraph snappers..... | .55 |
| 1 set of suggestion blocks..... | 5.50 |
| 1 perimeter..... | 9.90 |
| 1 clamp..... | 1.10 |
| 1 olfactometer..... | 3.85 |
| 1 support..... | 1.10 |

| | |
|---|----------|
| 1 vernier chronoscope..... | \$11. 00 |
| 1 holmgren wools..... | 2. 75 |
| 1 set of brushes..... | . 50 |
| 2 Y tubes..... | . 20 |
| 11 dividers..... | . 22 |
| 12 feet rubber tubing..... | 1. 08 |
| 1 Masson's disk..... | . 55 |
| 1 protractor..... | . 27 |
| 2 temperature cylinders (extra cylinder)..... | 3. 80 |
| 1 set of dies..... | . 55 |
| 3 puzzle pictures..... | . 33 |
| 1 set Quincke's tubes..... | 2. 50 |
| 2 color tops..... | . 16 |
| 5 beakers..... | . 45 |
| 3 wire gauze..... | . 15 |
| 1 Bunsen burner..... | . 30 |
| 1 balance..... | 1. 00 |
| 1 set of weights..... | . 75 |
| 1 set of blank cards..... | . 11 |
| 1 metronome..... | 3. 50 |
| 1 compass..... | . 15 |
| 1 stop watch..... | 6. 50 |
| 1 memory apparatus..... | 11. 00 |
| 1 set stimulus and test cards..... | 6. 60 |
| 1 Wilson gummed letters, 1 set..... | 1. 92 |
| 1 chart, nervous system..... | 1. 00 |
| 1 chart, sense organs..... | 1. 00 |
| 1 astigmatic dial..... | . 50 |
| 1 Snellen test type..... | . 25 |
| 1 reading test type..... | . 25 |
| 1 Dandolt test type..... | . 25 |
| 1 tool chest and tools..... | 18. 00 |
| 1 workbench..... | 10. 80 |
| Nails, screws, etc..... | 1. 00 |
| 6 tables..... | 6. 00 |
| 8 chairs..... | 4. 00 |
| 1 apparatus case..... | 10. 00 |
| | <hr/> |
| | 168. 09 |

4. (a) Ten students are enrolled for laboratory work this year. (b) About 30 students could be accommodated by working in sections of 10 each.

The apparatus of the above equipment of the psychological laboratory was purchased out of a fund of \$150, contributed in \$25 subscriptions by friends of the university interested in providing instruction in experimental psychology, particularly for teachers. Most of the students now enrolled in laboratory work are teachers in service in the public schools.

Arts and crafts equipment: Friends of the university interested in establishing in the university studio courses in the household arts raised and donated to the university for the purpose the sum of \$1,060, which was expended upon the equipment of four studios, as follows: Metal work, designing, free-hand drawing and water-color painting, and artistic bookbinding. Although the studio courses in these branches were necessarily discontinued at the end of last year, the studio equipment remains in the possession of the university for possible future use.

EXHIBIT G.

COLLEGE OF MEDICINE.

MAY 7, 1910.

Dr. CHARLES W. NEEDHAM, *President,*
The George Washington University.

DEAR DOCTOR NEEDHAM: In compliance with your directions of April 29, I submit herewith a detailed statement of the capacity of the medical college building, together with a statement of all class rooms, giving the number of students that can be accommodated in each.

A statement is also given of the laboratories, showing an inventory of machinery and equipment, the number of students enrolled for work in each laboratory for this

year, and the number that can be accommodated. In itemizing the machinery and equipment, only material has been entered which is in use and serviceable.

Relative to the value of the articles, the estimate submitted has been made by the professors in charge of the laboratories. Their estimate in most cases is an approximate one, but they have been, I believe, as conservative as possible in their estimates.

In many cases an estimated value could not be given for the reason that there was absolutely no information immediately obtainable by which the value could be arrived at. To arrive at an estimate, it would be necessary to make a search of catalogues; the treasurer's expenditures, and in many cases employ experts.

Very truly, yours,

W. C. BORDEN, *Dean.*

Statement of the capacity of the medical college building, giving the number and sizes of rooms by floors.

Entire space covered by college building, 144 by 51 feet.

First floor: Entrance hall, 65 feet by 9 feet 6 inches; stairway space, 22 by 24 feet; dean's office, 16 by 17 feet; clerk's office, 10 by 17 feet; faculty room, 20 by 17 feet; student's assembly room, 15 by 17 feet; class room No. 1, 18 by 17 feet; museum, 37 by 17 feet; professor's room, 9 by 17 feet; elevator shaft, 5 by 10 feet; janitor's room, 8 feet by 10 feet 6 inches; professor's preparatory room, 8 by 19 feet; toilet, 22 by 10 feet; workshop, 18 by 9 feet; cold-storage room, 13 by 9 feet; injection room, 16 by 9 feet; 2 storage rooms, 6 by 12 feet; rear hall, 50 by 6 feet; bicycle space, 35 by 8 feet; lower part of lecture hall No. 1, 48 by 21 feet.

Second floor: Stairway hall, 20 feet by 19 feet 6 inches; main hall, 40 feet by 9 feet 6 inches; physiological research laboratory, 16 by 12 feet; physiological laboratory, 50 by 17 feet; excessory physiological laboratory, 20 by 10 feet; class room No. 2, 32 by 17 feet; 4 professor's rooms, each 17 by 8 feet; 1 professor's room, 6 by 10 feet; 1 professor's room, 7 by 10 feet; janitor's room, 10 by 13 feet; 2 preparatory rooms, 10 feet 6 inches by 15 feet; lecture hall No. 1, 50 by 50 feet.

Third floor: Stairway hall, 22 by 24 feet; hall, 16 by 6 feet; chemical laboratory, 50 by 48 feet; chemical storeroom, 14 by 14 feet; chemical preparatory room, 14 by 20 feet; laboratory, 13 by 11 feet; professor's room, 7 feet 6 inches by 11 feet; 2 preparation rooms, 8 feet 6 inches by 15 feet 6 inches; lower part of lecture hall No. 2, 50 by 48 feet; lecture hall, No. 3, 50 by 23 feet.

Fourth floor: Stairway, 22 by 24 feet; hall, 48 by 5 feet; dental room, 80 by 17 feet; dental laboratory, 22 by 23 feet; dental laboratory, 24 by 23 feet; extracting room, 9 feet 6 inches by 10 feet; toilet, 5 by 10 feet; toilet, 6 by 11 feet; professor's room, 6 feet 6 inches by 11 feet; histological preparation room, 9 by 11 feet; professor's room, 9 feet 6 inches by 11 feet; preparation room, 8 feet 6 inches by 11 feet; histological and embryological laboratory, 23 by 50 feet; library, 23 by 50 feet.

Fifth floor: Stairway hall, 22 by 24 feet; hall, 5 by 21 feet; dissecting room, 48 by 48 feet; bone room, 5 feet 6 inches by 11 feet; professor's room, 10 by 11 feet; class room, 18 by 16 feet; prospecting room, 16 by 10 feet; toilet, 6 by 11 feet; pathological and bacteriological laboratory, 50 by 48 feet; pathological storeroom, 15 by 5 feet; bacteriological preparation room, 16 by 12 feet; clinical laboratory, 9 by 11 feet; professor's room, 7 feet 6 inches by 11 feet.

Sixth floor: Animal room, 22 feet 6 inches by 16 feet 6 inches; animal room, 16 feet 8 inches by 16 feet.

Statement of class rooms in the medical college building, with the number of students that can be accommodated at a class period in each room.

| | Number of students accommodated. |
|--|-------------------------------------|
| Class room No. 1..... | 25 |
| Students' assembly room..... | 25 |
| Class room No. 2..... | 75 |
| Lecture hall No. 1..... | 375 |
| Lecture hall No. 2..... | 350 |
| Lecture hall No. 3..... | 150 |
| Anatomical laboratory..... | 150 |
| Pathological and bacteriological laboratory..... | 100 |
| Histological laboratory..... | 80 |
| Chemical laboratory..... | 92 |
| Physiological laboratory..... | 75 |

To this should be added the following, used for students in the university hospital:

| | |
|-----------------------------|------|
| Operating amphitheater..... | \$75 |
| Clinical class room | 50 |
| X-ray room..... | 5 |

Statement of laboratories in the medical college building, giving the size of each and a detailed inventory of the machinery and equipment, with number of students enrolled in each for this year and the number that can be accommodated.

Anatomical laboratory, 48 by 48 feet. Accessory rooms to anatomical laboratory. Bone room, 5 feet 6 inches by 11 feet. Prospecting room, 16 by 10 feet.

Students enrolled for work in this laboratory this year: Medical, 12; dental, 15; total, 27. Number of students that can be accommodated, 150.

Inventory of equipment.

| | Estimated value. |
|--|------------------|
| 16 dissecting tables..... | \$80.00 |
| 20 dissecting stools..... | 20.00 |
| Injecting apparatus..... | 50.00 |
| Bone boiler..... | 10.00 |
| 7 galvanized-iron section boxes..... | 70.00 |
| 100 lockers..... | 300.00 |
| 25 galvanized-iron buckets..... | 5.00 |
| 5 earthenware jars..... | 5.00 |
| 6 wash basins, with plumbing..... | 90.00 |
| 5 towel racks..... | .75 |
| 1 blackboard..... | 5.00 |
| 6 stereoscopes..... | 6.00 |
| 1 stereoscopic anatomy..... | 48.00 |
| 4 human skeletons..... | 100.00 |
| 400 assorted bones..... | Unknown. |
| 1 disarticulated head..... | 50.00 |
| 253 anatomical charts..... | 400.00 |
| 200 lantern slides..... | 100.00 |
| 5 models of the head..... | 50.00 |
| 1 model of the human body..... | 100.00 |
| 1 model of the human body..... | 50.00 |
| 1 electric saw for cutting frozen sections of the human body..... | 200.00 |
| 3 tanks for preserving bodies..... | 175.00 |
| Dissecting instruments, 29, of all kinds..... | 14.50 |
| There is also on the first floor of the building a cold-storage room for preserving human bodies with a Remington refrigerating machine..... | 1,500.00 |
| Total..... | 3,429.25 |

Histological laboratory, 23 by 50 feet.

Number of students enrolled for this year in this laboratory: Medical, 12; special, 1; veterinary students, 17; dental students, 17; total, 47.

Inventory of equipment.

| | |
|---|----------|
| Laboratory tables and desks equipped with electric lights for 30 students.. | \$80.00 |
| 40 stools, at 75 cents..... | 30.00 |
| 72 lockers..... | 20.00 |
| Incubator and thermoregulator..... | 25.00 |
| Microscope case..... | 25.00 |
| 50 sets microscopical preparations, at \$15..... | 750.00 |
| 63 compound microscopes, at \$30..... | 1,890.00 |
| Paraffin bath..... | 12.00 |
| Projection apparatus..... | 100.00 |
| 2 microtomes and knives..... | 90.00 |
| 1 microtome and knife..... | 23.18 |
| 740 reagent and specimen bottles, at 5 cents..... | 37.00 |
| 350 staining dishes, at 4 cents..... | 14.00 |
| 200 bottles, at 8 cents..... | 16.00 |

| | |
|--|----------|
| 40 stock solution bottles, at 25 cents..... | \$10.00 |
| 50 balsam bottles, at 15 cents..... | 7.50 |
| 5 specimen jars, at \$2..... | 10.00 |
| 34 specimen jars, at 20 cents..... | 6.80 |
| 300 embedding blocks..... | 16.60 |
| 16 gallons formalin..... | 12.08 |
| 2,500 cubic centimeters absolute alcohol..... | 3.75 |
| 10 gallons zylol..... | 22.00 |
| 1,000 cubic centimeters oil of thyme..... | 3.00 |
| 20 pounds paraffin..... | 2.20 |
| Filter paper..... | 8.00 |
| 6 glass graduates..... | 4.30 |
| 50 funnels..... | 7.00 |
| 2 scalpels..... | .50 |
| 2 gross glass slides..... | 1.70 |
| Small quantities of various stains and reagents..... | 40.00 |
| Miscellaneous laboratory accessories..... | 20.00 |
| Reference books..... | 20.00 |
| Total..... | 3,307.61 |

In addition to the above, there are many hundred specimens of tissues preserved in bottles of different sizes for class use. These specimens have been collected from time to time and it is impossible to place any money value upon them, but they represent a large value in time and labor.

Chemical laboratory, 50 by 48 feet; accessory laboratory, 13 by 11 feet.

Students enrolled for work in this laboratory this year: Medical, 54; veterinary, 44; dental, 21; total, 119. Number of students that can be accommodated at one time, 92.

Laboratory equipment, exclusive of chemicals and apparatus.

Articles:

| | |
|--|----------|
| 92 desks, with plumbing and gas fitting..... | \$500.00 |
| Sink, 11, with plumbing (estimated)..... | 220.00 |
| 8 hoods, with gas fitting and plumbing..... | 175.00 |
| 24 incandescent lamps, with fittings..... | 24.00 |
| Shelving (estimated)..... | 35.00 |
| 2 glass cases, preparation room..... | 20.00 |
| 4 desks, in preparation room..... | 20.00 |
| 6 chairs..... | 6.00 |
| 3 tables..... | 10.00 |
| | <hr/> |
| | 1,010.00 |

Apparatus:

| | |
|--|-------|
| 101 Bunsen burners..... | 25.25 |
| Wash bottles, 6-ounce, fitted..... | 36.00 |
| Funnels— | |
| 2 (1,000 cubic centimeters)..... | 2.00 |
| 8 dozen (250 cubic centimeters)..... | 38.40 |
| 150 beakers..... | 40.00 |
| 15 dozen test glasses..... | 54.00 |
| 8 gross test tubes..... | 17.28 |
| 100 test-tube holders..... | 10.00 |
| 125 test-tube racks..... | 50.00 |
| 36 test-tube brushes..... | 3.60 |
| 3 dozen medium evaporating dishes..... | 10.80 |
| 1 dozen large evaporating dishes..... | 6.00 |
| 108 iron stands, with clamps..... | 70.10 |
| 95 mortars and pestles for class work—(1 large, 1 medium)..... | 90.00 |
| 120 files, round..... | 6.00 |
| 120 files, triangular..... | 6.00 |
| 10 dozen blue glass..... | 10.00 |
| 120 hydrogen flasks, fitted..... | 36.00 |
| 100 arsenic plates..... | 8.00 |
| 75 blowpipes..... | 15.00 |
| 1 square yard wire gauze..... | .40 |
| 9 dozen watch glasses..... | 10.80 |

Apparatus—Continued.

| | |
|--|---------|
| 15 dozen pipettes..... | \$45.00 |
| 136 pincers..... | 13.60 |
| 159 spatulas..... | 57.70 |
| 18 grams platinum wire, at \$1.50 per gram..... | 19.80 |
| 40 grams platinum foil, at \$1.10 per gram..... | 44.00 |
| Graduate glasses— | |
| 90 (250 cubic centimeters)..... | 45.00 |
| 124 (25 cubic centimeters)..... | 43.40 |
| 36 urinometers..... | 21.60 |
| Ureometers— | |
| 10 dozen demonstration..... | 48.00 |
| 1 Hines Doremus..... | 4.50 |
| 15 burettes, with stopcock..... | 52.50 |
| 8 dozen burettes..... | 120.00 |
| 25 thermometers, dairy..... | 3.75 |
| 38 thermometers, chemical..... | 37.20 |
| 36 flasks, distillation..... | 10.80 |
| 15 flasks, Florence..... | 6.00 |
| 12 flasks, graduate, 1-liter..... | 8.40 |
| 1 flask, graduate, 500-liter..... | .55 |
| 2 flasks, graduate, 100 cubic centimeters..... | .46 |
| 12 flasks, Erlenmeyer..... | 3.00 |
| 9 balances, at \$35..... | 335.00 |
| 1 balance..... | 25.00 |
| 1 balance..... | 45.00 |
| 1 polariscope..... | 25.00 |
| 1 microscope, demonstration..... | 12.00 |
| 2 spectroscopes..... | 13.00 |
| 3 evaporating dishes, large..... | 3.00 |
| 13 balances, pharmacists..... | 39.00 |
| 1 set balances, for rough work..... | 8.00 |
| 1 graduate, 1,000 cubic centimeters..... | 1.00 |
| 1 graduate, 1,500 cubic centimeters..... | 1.00 |
| Weights— | |
| 14 sets in boxes..... | 28.00 |
| 1 gold-plated set..... | 11.00 |
| 1 still, water, continuous..... | 13.50 |
| 1 still, alcohol..... | 8.00 |
| 15 Liebig condensers..... | 30.00 |
| 2 water baths..... | 4.50 |
| 4 Kipp generators, large (only 2 in good condition)..... | 18.00 |
| 1 large blowpipe with foot bellows..... | 6.50 |
| 1 large mortar and pestle..... | 2.25 |
| 7 vapor flasks..... | 3.50 |
| 1 large Gooch funnel..... | 2.50 |
| 2 small Gooch funnels..... | 2.00 |
| 1 large drying bath..... | 2.40 |
| 2 small drying baths..... | 2.40 |
| 1 separating funnel, 1,000 cubic centimeters..... | 2.50 |
| 2 separating funnels, 500 cubic centimeters..... | 2.25 |
| 4 Gooch flasks, 500 cubic centimeters..... | 3.00 |
| 1 Gooch flask, 2,000 cubic centimeters..... | 1.25 |
| 1 platinum Gooch crucible..... | 32.75 |
| 2 sulphuric-acid bottles..... | 3.00 |
| 1 Woulf bottle..... | 1.10 |
| 11 test tubes, with base..... | 1.65 |
| 5 small flasks (Erlenmeyer)..... | 1.50 |
| 5 large flasks (Erlenmeyer)..... | 3.00 |
| 160 blowpipe tips for burners..... | 8.00 |
| 2 Cook presses..... | 3.00 |
| 1 large water bath, chemical laboratory..... | 2.80 |
| Rubber stoppers..... | 3.25 |
| Rubber sheeting..... | .75 |
| Rubber tubing..... | 1.60 |
| Rubber tubing pressure..... | 1.80 |
| Glass tubing..... | 8.00 |
| Microscope..... | 35.00 |

Apparatus—Continued.

Reagent bottles, chemical laboratory—

| | |
|---|---------|
| 12 dozen, 250 cubic centimeters, at \$3.60 per dozen | \$43.20 |
| 100 dozen, 125 cubic centimeters, at \$2.70 per dozen | 270.00 |
| 20 dozen, 125 cubic centimeters, wide mouth, at \$3 per dozen.... | 60.00 |
| 150 5-pint glass-stoppered stock bottles, at 15 cents | 22.50 |

| | |
|------------|----------|
| Total..... | 2,284.34 |
|------------|----------|

CHEMICALS:

| | |
|--|------|
| Ammonium hydroxid, 40 pounds..... | 4.80 |
| Ammonium chlorid, 1 pound..... | .15 |
| Ammonium phosphate, 3½ pounds..... | .88 |
| Ammonium nitrate, 4 pounds..... | 1.00 |
| Ammonium nitrate, 3½ pounds..... | 3.50 |
| Ammonium carbonate, 1½ pounds..... | .30 |
| Ammonium benzoate, ½ pound..... | .40 |
| Ammonium oxalate, 1¼ pounds..... | .75 |
| Ammonium molybdate, 1 pound..... | 2.00 |
| Aluminum sulphate, 1 pound..... | .10 |
| Aluminum chloride 1½ pounds..... | .90 |
| Aluminum potass. sulphate, 8½ pounds..... | 2.13 |
| Antimony et potassium tartrate, 1 ounce..... | .05 |
| Antimony chlorid, 1 pound..... | 1.40 |
| Antimony sulfid, ¾ pound..... | .75 |
| Arsenic acid, 4½ ounces..... | .05 |
| Arsenous acid, 4 ounces..... | .05 |
| Barium carbonate, 10 ounces..... | .30 |
| Barium nitrate, 1¼ pounds..... | .88 |
| Barium hydroxid, 2½ pounds..... | .50 |
| Barium nitrate, ¼ pound..... | .10 |
| Bismuth subnitrate, 1 pound..... | 2.00 |
| Bismuth chlorid, 100 grams..... | .75 |
| Bromine, 4 pounds..... | 3.20 |
| Calcium chlorid, pure, 5½ pounds..... | 1.65 |
| Calcium chlorid, crude, 1 pound..... | .05 |
| Calcium sulphate c. p., ½ pound..... | .40 |
| Cadmium chlorid, ¾ pound..... | 1.50 |
| Carbon by-sulphid, ¼ pound..... | .10 |
| Chromic acid, 1½ ounces..... | .20 |
| Cerium oxalate, 2 pounds 6 ounces..... | 1.25 |
| Chrome alum, 2 pounds..... | .30 |
| Cobalt nitrate, 1½ pounds..... | 2.00 |
| Copper foil c. p., 3 pounds..... | 2.25 |
| Copper chlorid, 6 ounces..... | .20 |
| Copper sulphate, 5 pounds..... | .75 |
| Copper acetate, 1½ pounds..... | .50 |
| Copper oxid, 5 pounds..... | 1.25 |
| Copper tartrate, 14 ounces..... | .30 |
| Ferric chlorid, 3 pounds..... | .90 |
| Ferric sulphate, 12 pounds..... | 1.20 |
| Ferric sulphate, granulated, 5 pounds..... | .60 |
| Ferric acetate, 1 pound..... | .40 |
| Ether, 10 pounds..... | 6.00 |
| Lead acetate, 3½ pounds..... | .70 |
| Lead oxid, 1¼ pounds..... | .18 |
| Lead nitrate, 4 ounces..... | .05 |
| Lithium chlorid, 6 ounces..... | .65 |
| Magnesium sulphate, 7½ pounds..... | .75 |
| Magnesium chlorid, ½ pound..... | .13 |
| Magnesium oxid, light, ½ pound..... | .35 |
| Magnesium carbonate, 1 pound..... | .50 |
| Manganese chlorid, 1 pound..... | .30 |
| Manganese di-oxid, 14 pounds..... | 1.40 |
| Manganese, sulphate, 2 pounds..... | 1.00 |
| Mercury, metallic, 4 pounds..... | 3.40 |

CHEMICALS—Continued.

| | |
|--|---------|
| Mercury oxid, $\frac{1}{2}$ pound..... | \$0. 85 |
| Mercuric chlorid, 5 pounds..... | 5. 00 |
| Mercurous chlorid, 1 pound..... | 1. 10 |
| Mercurous nitrate, 1 pound..... | 1. 50 |
| Mercury cyanid, 1 pound..... | 2. 00 |
| Nitrous acid, 4 pounds..... | 1. 20 |
| Nickel sulphate, 1 pound..... | . 25 |
| Nickel ammon. sulphate, 1 pound..... | . 20 |
| Nickel chlorid, $\frac{1}{2}$ pound..... | . 38 |
| Phosphorus, sticks, 1 pound..... | 1. 00 |
| Phosphorix anhydrid, $\frac{1}{2}$ pound..... | . 75 |
| Phosphorix acid, $\frac{1}{2}$ pound..... | . 20 |
| Phosphorix acid, meta, $1\frac{1}{2}$ pounds..... | . 98 |
| Potassium bromide, $3\frac{1}{2}$ pounds..... | 1. 35 |
| Potassium arsenate, 1 pound..... | . 40 |
| Potassium acetate, 1 pound..... | . 35 |
| Potassium sulphocyanate, 1 pound..... | . 80 |
| Potassium carbonate, 5 pounds..... | 1. 00 |
| Potassium chlorate, 17 pounds..... | 5. 95 |
| Potassium dichromate, 1 pound..... | . 18 |
| Potassium cyanid, $1\frac{1}{2}$ pounds..... | . 60 |
| Potassium citrate, 1 pound..... | . 60 |
| Potassium chromate, $1\frac{1}{2}$ pounds..... | . 70 |
| Potassium ferricyanid, $3\frac{1}{2}$ pounds..... | 3. 50 |
| Potassium ferrocyanid, $4\frac{1}{2}$ pounds..... | 2. 50 |
| Potassium hydroxid, 23 pounds..... | 5. 75 |
| Potassium thiocyanate, 1 pound..... | . 80 |
| Potassium iodide, $1\frac{1}{2}$ pounds..... | 3. 45 |
| Potassium permanganate, 4 pounds..... | 1. 00 |
| Potassium nitrate, 3 pounds..... | . 45 |
| Potassium sulphate, 1 pound..... | . 15 |
| Potassium tartrate, $\frac{1}{4}$ pound..... | . 15 |
| Silver nitrate, $\frac{1}{4}$ pound..... | 2. 00 |
| Sodium, metal, $1\frac{1}{2}$ pounds..... | 1. 50 |
| Sodium chloride, 20 pounds..... | 1. 00 |
| Sodium borate, 5 pounds..... | . 75 |
| Sodium potassium tartrate, 5 pounds..... | 1. 75 |
| Sodium hydroxid, 15 pounds..... | 3. 75 |
| Sodium carbonate, 6 pounds..... | . 60 |
| Sodium arsenate, 2 ounces..... | . 05 |
| Sodium bicarbonate, 1 pound..... | . 10 |
| Sodium nitrate, sticks, 2 pounds..... | 1. 00 |
| Sodium nitrate, crystals, $2\frac{1}{2}$ pounds..... | . 50 |
| Sodium molybdate, 5 ounces..... | . 60 |
| Sodium phosphate, 2 pounds..... | . 30 |
| Sodium sulphate, $2\frac{3}{4}$ pounds..... | . 65 |
| Sodium salicylate, 6 ounces..... | . 20 |
| Sodium tartrate, 8 ounces..... | . 38 |
| Sodium hyposulphate, 2 pounds..... | . 20 |
| Strontium chloride, 4 ounces..... | . 05 |
| Sulphur, flowers, 2 pounds..... | . 20 |
| Stannic chlorid, 8 ounces..... | . 30 |
| Stannic(ous) chloride, 6 ounces..... | . 20 |
| Stannic(ic) acid, 4 ounces..... | . 15 |
| Uranium acetate, 4 ounces..... | 2. 00 |
| Uranium nitrate, 10 ounces..... | 4. 00 |
| Carbamid, $1\frac{3}{4}$ pounds..... | 8. 40 |
| Zinc, metallic, 1 pound..... | . 20 |
| Zinc, chlorid, $1\frac{1}{4}$ pounds..... | . 30 |
| Zinc, sticks, 1 pound..... | . 50 |
| Zinc, acetate, 3 ounces..... | . 05 |
| Zinc sulphate, $2\frac{1}{4}$ pounds..... | . 25 |
| Hydrofluoric acid, $1\frac{1}{2}$ ounces..... | . 05 |
| Phloroglucin, 5 grams..... | 1. 00 |
| Starch, $\frac{1}{2}$ pound..... | . 05 |
| Acetone, 4 pounds..... | 1. 20 |

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| Glycerin, 6½ pounds..... | \$1. 95 |
| Chloroform, ½ pound..... | . 40 |
| Pyridin, 4 ounces..... | . 75 |
| Naphthol, 1 ounce..... | . 05 |
| Acetic ether, 12 ounces..... | . 60 |
| Acid: | |
| Nitric, fuming, 2 pounds..... | 1. 20 |
| Nitric, c. p., 7 pounds..... | . 70 |
| Sulphuric, c. p., 36 pounds..... | 2. 88 |
| Hydrochloric, c. p., 12 pounds..... | 1. 08 |
| Acetic, 1 pound..... | . 20 |
| Diacetic, 1 pound..... | 1. 25 |
| Propionic, 4 ounces..... | . 75 |
| Citric, 3 pounds..... | 1. 50 |
| Trichloracetic, 1½ pounds..... | . 38 |
| Oxalic, 10½ pounds..... | 4. 20 |
| Tannic, ½ pound..... | . 40 |
| Tartaric, 10 pounds..... | 4. 00 |
| Salicylic, 5 pounds..... | 2. 30 |
| Benzoic, 5 pounds..... | 3. 25 |
| Picric, 1½ pounds..... | . 70 |
| Molybdic, 1 pound..... | 1. 90 |
| Carbolic, 2 pounds..... | . 60 |
| Lactic, 2 pounds..... | 1. 40 |
| Sulphanilic, ½ pound..... | 1. 00 |
| Acetus, glacial, ¾ pound..... | . 75 |
| Naphthylamine sulphonic, 1 pound..... | 8. 00 |
| Methyl alcohol, 1 pint..... | . 05 |
| Phenylhydrazin hydrochlorid, 1½ pints..... | 3. 75 |
| Lactose, 1 pound..... | . 15 |
| Glucose, 8 pounds..... | . 80 |
| Peptone, ¾ pound..... | 2. 40 |
| Hydrogen peroxid, 1 pound..... | . 60 |
| Indigo, 8 ounces..... | . 30 |
| Dextrin, 12 ounces..... | . 10 |
| Benzol, ¾ pound..... | . 12 |
| Ox bile, 1 pound..... | . 60 |
| Hemp seed, 3 pounds..... | . 15 |
| Diphenylamine, 8 ounces..... | 1. 25 |
| 12 ounces..... | . 30 |

190. 23

Electro-therapeutic laboratory.—Size of laboratory, 12 by 9 feet. Number of students enrolled for work in that laboratory this year, 32. Number of students that can be accommodated in the laboratory, 5. (Work with the X-ray apparatus is of such a character that students can be instructed only in small sections; hence the small size of the laboratory.) Equipment: One Scheidell western X-ray apparatus, with all necessary accessory electrical appliances, X-ray tubes and one large compression diaphragm and stand, \$730.

Physiological laboratory.—Fifty by 17 feet. Accessory laboratory, 20 by 10 feet; physiological research laboratory, 16 by 12 feet. Students enrolled for work in this laboratory this year: Medical students, 13; dental students, 17; total, 30. Number of students that can be accommodated, 75. (For inventory and equipment, see following pages.)

Inventory, physiological laboratory.

| | |
|--|---------|
| 1 set screens..... | \$3. 00 |
| 1 poison cabinet..... | 5. 00 |
| 1 chemical table with sink, water and gas connections..... | 50. 00 |
| 1 chemical table with drawers..... | 30. 00 |
| 1 chemical hood with sink..... | 30. 00 |
| 1 chair..... | 1. 50 |
| 1 stool..... | 1. 00 |
| 1 pound covered copper wire..... | . 85 |
| 1 pointer..... | . 50 |
| 2 keyboards (with keys for lockers)..... | 1. 00 |

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|--|---------|
| 1 flat-bottom flask..... | \$0. 25 |
| $\frac{1}{2}$ pound shellac in scales..... | . 05 |
| 1 bag salt..... | . 05 |
| 1 bottle, 3-liter capacity..... | . 25 |
| 2 glass-stoppered bottles, white, 100 cubic centimeters..... | . 22 |
| 1 glass-stoppered bottle, cold, 100 cubic centimeters..... | . 11 |
| 1 wide-mouth stoppered bottle, white, 100 cubic centimeters..... | . 17 |
| 2 glass-stoppered bottles, white, 15 cubic centimeters..... | . 12 |
| 1 glass-stoppered bottle, white, 30 cubic centimeters..... | . 07 |
| 1 bottle, 1,000 cubic centimeters..... | . 15 |
| 2 volumes Schafer Text-Book of Physiology..... | 18. 00 |
| 1 Tigerstrot physiology..... | 4. 00 |
| 1 Howell physiology..... | 4. 00 |
| 2 boxes for rymograph paper..... | 1. 00 |
| 1 handsaw..... | 1. 15 |
| 1 folding meter rule..... | . 20 |
| 2 rheocons..... | 1. 50 |
| 7 dry batteries..... | 1. 40 |
| 1 kilo copper sulphate..... | . 40 |
| $\frac{1}{2}$ kilo Todwin hydrate..... | . 35 |
| $\frac{1}{2}$ kilo magnesium sulphate..... | . 20 |
| 1 pound potassium chloride..... | . 35 |
| 500 grams potassium permanganate..... | . 25 |
| 500 grams oxalic acid..... | . 40 |
| 500 grams potassium ferrocyanide..... | . 40 |
| 150 grams lead acetate..... | . 20 |
| 150 grams sulphuric ether..... | . 25 |
| 400 grams ammonium sulphate..... | . 30 |
| $\frac{1}{2}$ pound salicylic acid..... | . 25 |
| $\frac{1}{2}$ pound cornstarch..... | . 10 |
| 1.7 kilos redistilled mercury..... | 2. 50 |
| 1 pound white vaseline..... | . 60 |
| 100 grams glass wool..... | 1. 20 |
| $\frac{1}{2}$ pound wheat starch..... | . 10 |
| $\frac{1}{2}$ pound arrowroot starch..... | . 40 |
| 25 grams morphine sulphate..... | 3. 25 |
| 100 grams salol..... | . 60 |
| 10 grams pepsin..... | . 20 |
| 10 grams hemoglobin..... | . 20 |
| 25 grams maltose..... | . 50 |
| 15 grams iodine, resublimed..... | . 20 |
| 75 grains curare..... | 5. 00 |
| 15 grains physostigmine sulphate..... | 1. 10 |
| 1 gram glycogen..... | . 60 |
| 5 grams picrotoxin..... | . 75 |
| 5 grams cocaine hydrochlorate..... | . 60 |
| 10 grams atropine sulphate..... | 2. 50 |
| $\frac{1}{4}$ ounce nicotine..... | . 75 |
| 25 grams pyalin..... | . 40 |
| 12 grams diastase of malt..... | . 40 |
| $\frac{1}{2}$ ounce seyarenal, 1:1000..... | . 80 |
| 100 grams dextrose..... | . 30 |
| $\frac{1}{2}$ ounce chloroform..... | . 25 |
| 200 grams thymol..... | 1. 50 |
| 1 pound casein..... | 4. 00 |
| 100 grams casein..... | 1. 00 |
| 100 grams lactose..... | . 20 |
| 10 grams trypsin..... | 3. 00 |
| 25 grams oxgall..... | . 35 |
| 5 grams fibrin..... | . 10 |
| 100 grains dextrin..... | . 20 |
| 300 grams zinc chloride..... | . 20 |
| 75 grains menthol..... | . 75 |
| 20 grams protein..... | . 75 |
| 20 grams peptone..... | . 25 |
| 1 box Mide's peptone..... | . 85 |
| 20 grains acet..... | . 25 |

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| 25 grams litmus..... | \$0. 20 |
| 1 box gelatine..... | . 25 |
| 10 grams nicotine..... | . 75 |
| 10 grams caffein citrate..... | . 20 |
| 10 grains carmine..... | . 20 |
| 4 grams cocaine hydrochlorate..... | . 50 |
| 3 drams menthol, in alcohol..... | . 20 |
| $\frac{1}{2}$ gram aconiteine..... | . 25 |
| 25 grams phenophtalein..... | . 30 |
| 2.5 grams veratrive..... | . 25 |
| 50 grams potassium iodide..... | . 50 |
| 1 gram atrogine sulphate..... | . 25 |
| 15 grams strychnine sulphate..... | . 50 |
| 40 grams silver nitrate..... | 1. 00 |
| 10 grams hydrastine hydrochlorate..... | 11. 00 |
| 25 grams strychnine..... | . 60 |
| 1 ounce caffein citrate..... | . 30 |
| 100 grains chloral hydrate..... | . 25 |
| 10 grains eserine sulphate..... | 1. 00 |
| $\frac{1}{8}$ ounce picrotoxin..... | . 60 |
| $\frac{1}{2}$ gram digitaline..... | . 20 |
| $\frac{1}{2}$ pound calomel..... | . 60 |
| 250 grams emery, medium..... | . 10 |
| 250 grams emery, fine..... | . 10 |
| 5 bottles, containing litmus and other test paper..... | 1. 00 |
| 32 pearls amylnitrite..... | 1. 00 |
| 5 tubes mucarine..... | 5. 00 |
| 1 kymograph..... | 20. 00 |
| 1 bottle, glass stopper, 100 cubic centimeters..... | . 10 |
| 1 rheocord..... | 2. 50 |
| 1 induction..... | 7. 00 |
| 2 standards..... | 1. 50 |
| 3 aluminum styles..... | . 15 |
| 20 10-gram weights..... | . 20 |
| 1 evaporating dish..... | . 16 |
| 1 tuning fork..... | 1. 00 |
| 1 red layer electrode..... | . 25 |
| 1 muscle lever..... | 1. 15 |
| 1 signal magnet..... | 1. 00 |
| 1 brant lever..... | . 75 |
| 1 femur clamp..... | 1. 00 |
| 1 brant clamp..... | . 75 |
| 3 large holders..... | . 06 |
| 1 simple key..... | 1. 00 |
| 2 servers' glasses..... | . 05 |
| 4 watch glasses..... | . 08 |
| 1 dry battery..... | . 20 |
| 1 platinum electrode..... | 1. 00 |
| 2 tuning forks..... | 2. 00 |
| 1 wooden stand..... | . 90 |
| 1 frog board..... | . 60 |
| 1 kymograph..... | 20. 00 |
| 21 10-gram weights..... | . 21 |
| 2 aluminum styles..... | . 10 |
| 3 muscle levers..... | 3. 45 |
| 1 head lever..... | . 75 |
| 1 signal magnet..... | 1. 00 |
| 1 pipette, 2 cubic centimeters..... | . 06 |
| 1 evaporating dish..... | . 16 |
| 1 plate glass..... | . 10 |
| 2 large electrodes..... | . 25 |
| 1 platinum electrode..... | 1. 00 |
| 1 crystallizing dish..... | . 14 |
| 1 femur clamp..... | 1. 00 |
| 1 head clamp..... | . 75 |
| 4 leg holders..... | . 08 |
| 1 simple key..... | 1. 00 |

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| 1 pipette, 1 cubic centimeter..... | \$0.05 |
| 2 standards..... | .75 |
| 4 double clamps..... | .80 |
| 1 battery..... | .20 |
| 1 Bunsen burner..... | .45 |
| 1 rheocord..... | 2.50 |
| 1 bottle (glass stoppered), 100 cubic centimeters..... | .10 |
| 1 inductorium..... | 7.00 |
| 1 crystallizing dish..... | .14 |
| 1 kymograph..... | 20.00 |
| 1 bottle (glass stoppered), 100 cubic centimeters..... | .10 |
| 1 rheocord..... | 2.50 |
| 1 inductorium..... | 7.00 |
| 2 standards..... | 1.50 |
| 2 pipettes..... | .10 |
| 1 aluminum style..... | .05 |
| 20 10-gram weights..... | .20 |
| 1 evaporating dish..... | .16 |
| 1 tuning fork..... | 1.00 |
| 1 set large electrodes..... | .25 |
| 1 watch glass..... | .02 |
| 1 clamp..... | 1.00 |
| 1 muscle lever..... | 1.15 |
| 1 signal magnet..... | 1.00 |
| 1 head lever..... | .75 |
| 4 leg holders..... | .08 |
| 2 weight pans..... | .20 |
| 1 head clamp..... | .25 |
| 1 frog board..... | .60 |
| 1 simple key..... | 1.00 |
| 1 induction..... | 7.00 |
| 1 battery..... | .20 |
| 1 Bunsen burner..... | .45 |
| 1 platinum electrode..... | 1.00 |
| 2 standards..... | 1.50 |
| 1 wooden stand..... | .90 |
| 1 femur clamp..... | 1.00 |
| 1 glass plate..... | .10 |
| 1 frog board..... | .60 |
| 3 watch glasses..... | .06 |
| 4 leg holders..... | .08 |
| 1 signal magnet..... | 1.00 |
| 1 evaporating dish..... | .16 |
| 2 pipettes..... | .10 |
| 1 small beaker..... | .15 |
| 1 crystallizing dish..... | .14 |
| 1 head lever..... | .75 |
| 1 tuning fork..... | 1.00 |
| 1 kymograph..... | 20.00 |
| 2 muscle levers..... | 2.30 |
| 1 key..... | 1.00 |
| 1 rheocord..... | 2.50 |
| 1 bottle (glass stoppered), 100 cubic centimeters..... | .10 |
| 1 head clamp..... | .75 |
| 3 dry batteries..... | .60 |
| 1 kymograph..... | 20.00 |
| 1 rheocord..... | 2.50 |
| 1 Bunsen burner..... | .45 |
| 1 bottle (glass stoppered), 100 cubic centimeters..... | .10 |
| 1 induction..... | 7.00 |
| 1 platinum electrode..... | 1.00 |
| 1 wooden stand..... | .90 |
| 1 frog board..... | .60 |
| 20 10-gram weights..... | .20 |
| 4 water glasses..... | .08 |
| 1 evaporating dish..... | .16 |
| 1 tuning fork..... | 1.00 |

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|--|--------|
| 1 simple key..... | \$1.00 |
| 2 signal magnets..... | 2.30 |
| 1 femur clamp..... | 1.00 |
| 2 pipettes..... | .10 |
| 1 head clamp..... | .75 |
| 1 set large electrodes..... | .25 |
| 2 muscle levers..... | 2.30 |
| 1 head lever..... | .75 |
| 1 aluminum style..... | .05 |
| 6 leg holders..... | .12 |
| 2 standards..... | 1.50 |
| 1 weight pan..... | .10 |
| 5 double clamps..... | 1.00 |
| 1 glass plate..... | .10 |
| 1 crystallizing dish..... | .14 |
| 1 pipette, 1 cubic centimeter..... | .05 |
| 1 pipette, 2 cubic centimeters..... | .06 |
| 1 femur clamp..... | 1.15 |
| 1 kymograph..... | 20.00 |
| 4 watch glasses..... | .08 |
| 1 pinchcock..... | .10 |
| 1 Bunsen burner..... | .45 |
| 8 record holders..... | 2.00 |
| 20 10-gram weights..... | .20 |
| 1 rheocord..... | 2.50 |
| 1 induction..... | 7.00 |
| 1 large electrode..... | .25 |
| 1 head clamp..... | .75 |
| 1 simple key..... | 1.00 |
| 1 aluminum stylus..... | .05 |
| 2 standards..... | 1.50 |
| 1 frog board..... | .60 |
| 1 head lever..... | .75 |
| 1 wooden stand..... | .90 |
| 1 evaporating dish..... | .16 |
| 1 glass plate..... | .10 |
| 1 signal magnet..... | 1.00 |
| 1 battery..... | .20 |
| 1 platinum electrode..... | 1.00 |
| 1 bottle (glass-stoppered), 100 cubic centimeters..... | .10 |
| 1 circulation apparatus..... | 5.50 |
| 1 Bunsen burner..... | .45 |
| 1 crystallizing dish..... | .14 |
| 2 scalpels..... | 1.20 |
| 1 pair scissors..... | .50 |
| 3 hemostats..... | 1.40 |
| 1 cataract knife..... | .85 |
| 1 hemoglobinometer..... | 2.50 |
| 1 Coddington magnifier..... | 2.00 |
| 1 specific gravity tester..... | .75 |
| 1 Esbach albuminometer..... | .50 |
| 1 microscope, 3 and 7 objectives..... | 33.50 |
| 1 trephine $\frac{1}{2}$ | 2.50 |
| 1 balance..... | 12.50 |
| 1 Riva Rocci..... | 12.00 |
| 1 sphygmograph..... | 12.00 |
| 1 conical graduate, 30 cubic centimeters..... | .35 |
| 1 porcelain mortar (13 centimeters) and pestle..... | .65 |
| 1 conical graduate, 1,000 cubic centimeters..... | 1.65 |
| 1 straight graduate, 10 cubic centimeters..... | .28 |
| 1 Bunsen burner and 2 feet rubber tubing..... | .35 |
| 1 bottle, glass-stoppered, 4 liters..... | .50 |
| 1 B. & L. microscope, 3 and 7 objectives..... | 33.50 |
| 1 thistle tube..... | .06 |
| 2 porcelain dishes, 7.5 centimeters..... | .18 |
| 1 Erlenmeyer flask, 500 cubic centimeters..... | .20 |
| 1 flat-bottom flask, 500 cubic centimeters..... | .28 |

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|---|---------|
| 1 3-liter bottle, glass-stoppered..... | \$0. 50 |
| 1 3-liter bottle, glass-stoppered..... | . 25 |
| 1 standard, 90 centimeters..... | 1. 25 |
| 4 standards, 50 centimeters..... | 2. 60 |
| 1 glass funnel, 9 centimeters..... | . 15 |
| 1 beaker, 1,000 cubic centimeters..... | . 50 |
| 1 crockery-ware dipping basket, 6 by 4 inches..... | 1. 00 |
| 1 saucepan, 1-pint, enameled..... | . 25 |
| 1 soap dish..... | . 25 |
| 1 test-tube brush..... | . 06 |
| 2 filter pumps..... | 1. 80 |
| 1 Fletcher high-power burner..... | 3. 15 |
| 2 pipe-stem triangles, 6 centimeters..... | . 10 |
| 1 beaker, 1,000 cubic centimeters..... | . 50 |
| 1 porcelain evaporating dish, 11 centimeters..... | . 25 |
| 1 straight graduate, 200 cubic centimeters..... | . 70 |
| 100 diamond ink for glass..... | . 50 |
| 2 wash bottles, 500 cubic centimeters..... | . 50 |
| 3 acid bottles, 250 cubic centimeters, glass-stoppered..... | . 75 |
| 2 glass-stoppered bottles, 500 cubic centimeters..... | . 36 |
| 7 pounds nitric acid..... | . 70 |
| $\frac{1}{2}$ pound ammonia water..... | . 25 |
| 4 pounds sulphuric acid..... | . 35 |
| 2 pounds nitric acid..... | . 30 |
| 2 pounds nitric acid..... | . 30 |
| 500 grams acetic acid, 80 per cent..... | . 30 |
| 750 grams formaldehyde..... | . 60 |
| 1 kilo H_2O_2 | . 50 |
| 4 3-liter bottles..... | 1. 00 |
| 1 desk..... | 3. 00 |
| 1 Galton whistle..... | 1. 80 |
| 1 tuning fork with A. 96..... | 4. 50 |
| 1 tuning fork C 1024..... | 2. 00 |
| 1 tuning fork 512..... | 2. 25 |
| 1 tuning fork A..... | . 50 |
| 1 tuning fork C..... | . 50 |
| 1 tuning fork with Shivers C'..... | 1. 75 |
| 3 corks, 13 by 10 centimeters..... | . 24 |
| 2 cardiographs..... | 13. 00 |
| 1 oncimeter..... | 16. 80 |
| 1 standard, 50 centimeters..... | . 65 |
| 1 glass-stoppered bottle, 250 centimeters..... | . 16 |
| 1 porcelain evaporating dish, 13 centimeters..... | . 30 |
| 1 hemoglobinometer..... | 2. 50 |
| 1 Thema hemocylometer..... | 6. 50 |
| 1 Erlenmeyer flask, 500 cubic centimeters..... | . 20 |
| 1 flat-bottom flask, 500 cubic centimeters..... | . 28 |
| 1 tripod..... | . 25 |
| 1 ink gauze..... | . 05 |
| 1 respirative scheme..... | 2. 50 |
| 2 soldering cups..... | . 65 |
| 1 Layer tripod, 22 centimeters..... | . 45 |
| 1 safety thermostat burner..... | 3. 75 |
| 1 spool ball copper wire..... | . 50 |
| 1 small Bunsen burner..... | . 35 |
| 1 alcohol lamp..... | . 50 |
| 2 pole changers..... | 4. 50 |
| 1 Bunsen burner..... | . 35 |
| 2 pounds mercury..... | 1. 80 |
| 1 Bunsen burner..... | . 35 |
| 6 glass-stoppered bottles, white, 100 cubic centimeters..... | . 60 |
| 1 glass-stoppered bottle, colored, 100 cubic centimeters..... | . 10 |
| 1 glass-stoppered bottle, white, 250 cubic centimeters..... | . 16 |
| 4 beakers, 100 cubic centimeters..... | . 44 |
| 2 beakers, 200 cubic centimeters..... | . 36 |
| 1 beaker, 250 cubic centimeters..... | . 20 |
| 1 glass, half pint..... | . 05 |

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| 1 small balance..... | \$5. 00 |
| 1 set weights, 10 grams to 1 centigram..... | 5. 00 |
| 1 dry battery..... | . 20 |
| 1 set weights, 2 kilos to 1 gram..... | 1. 45 |
| 1 scales to weigh 5 kilos..... | 5. 50 |
| 1 aspirator bottle, 5 liters, with tabulator..... | 1. 30 |
| 1 beaker, 250 cubic centimeters..... | . 20 |
| 1 foot bellows..... | 5. 00 |
| 12 small Y tubes..... | . 48 |
| 23 large tubes (Y tubes)..... | 1. 04 |
| 10 small T tubes..... | . 40 |
| 8 small thistle tubes..... | . 80 |
| 21 50 cubic centimeter pipettes..... | 3. 15 |
| 16 4 cubic centimeter pipettes..... | 1. 12 |
| 11 2 cubic centimeter pipettes..... | . 66 |
| 51 1 cubic centimeter pipettes..... | 2. 55 |
| 1 accurate 50 cubic centimeter pipette..... | . 40 |
| 1 accurate 25 cubic centimeter pipette..... | . 30 |
| 1 accurate 5 cubic centimeter pipette..... | . 18 |
| 1 accurate 1 cubic centimeter pipette..... | . 10 |
| 1 thermometer, 0-120° C..... | . 50 |
| 1 incubator thermometer C..... | 1. 60 |
| 6 thermometers, 0-110° C..... | 6. 60 |
| 1 specific gravity 1,000-1,400..... | . 75 |
| 1 package filter paper, 18.5 centimeters; 1½ packages filter paper, 15 centimeters; 1 package filter paper, 12.5 centimeters; 1 package filter paper, 9 centimeters; 1 package filter paper 5.5 centimeters..... | 2. 05 |
| 3 vials litmus paper..... | . 21 |
| 1 box labels..... | . 05 |
| 2 3-lens simple magnifiers..... | 1. 00 |
| 2 thermometers, 0-110 C..... | 1. 20 |
| 1 battery tester..... | 6. 00 |
| 1 wire-cutting pliers..... | . 63 |
| 1 cork knife..... | . 15 |
| 1 scissors..... | . 50 |
| 2 files..... | . 25 |
| 1 brush..... | . 17 |
| 1 set cork borers (6)..... | . 60 |
| 1 cork press..... | . 35 |
| 2 gross corks..... | . 75 |
| 1 beaker brush..... | . 15 |
| 2 test-tube brushes..... | . 12 |
| 2 metal spatulas..... | . 60 |
| 1 bone spatula..... | . 10 |
| 2 porcelain spoon spatulas..... | . 40 |
| 7 evaporating dishes, 7 centimeters..... | . 16 |
| 1 watch glass, 16 centimeters..... | . 24 |
| 1 watch glass, 11 centimeters..... | . 12 |
| 8 watch glasses, 7 centimeters..... | . 36 |
| 48 watch glasses, 5 centimeters..... | . 96 |
| 11 watch glasses, 6 centimeters..... | . 50 |
| 26 watch glasses, 3.5 centimeters..... | . 52 |
| 35 watch glasses, 4.2 centimeters..... | . 70 |
| 2 boxes microscope slides (about 75)..... | . 60 |
| 2 boxes cover glasses..... | . 90 |
| 3.4 rubber tubing..... | 10. 00 |
| 2 glass jars, 22 by 11 centimeters..... | . 70 |
| 3 soft boards, 10 by ½ inches..... | 1. 20 |
| 2 wall charts..... | 5. 00 |
| 2 battery jars..... | . 60 |
| 1 chemical case..... | 5. 00 |
| 1 kilo sodium chloride..... | . 60 |
| 1 kilo boracic acid..... | . 40 |
| 1 kilo kaolin..... | . 20 |
| 1 kilo ammonia chloride..... | . 24 |
| 1 pound acetic acid..... | . 25 |
| 1 bottle machine oil..... | . 25 |

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|---|--------|
| 8 ounces carbolic acid..... | \$0.15 |
| 500 grams carbolic acid..... | .70 |
| 500 grams alum, calcined..... | .25 |
| 2 bags salt..... | .10 |
| 100 grams mercuric chloride..... | .50 |
| 100 grams Rochelle salts..... | .50 |
| 250 grams potassium chlorate..... | .25 |
| Pumice stone..... | .35 |
| 1 flag pole and flag..... | 10.00 |
| 3 kilos odd glass..... | 3.00 |
| 11 combustion tubing..... | 2.20 |
| Copper and brass gauze..... | 2.10 |
| 1 specimen jar..... | .25 |
| 1 flat-bottom flask, 50 cubic centimeters..... | .LL |
| 1 jar with lip for specific gravity..... | .50 |
| 1 Erlenmeyer flask, 500 cubic centimeters..... | .20 |
| 28 glass-stoppered bottles, 100 cubic centimeters..... | 2.80 |
| 4 glass-stoppered bottles, 100 cubic centimeters..... | .40 |
| 51 glass-stoppered bottles, 30 cubic centimeters..... | 3.57 |
| 68 glass-stoppered bottles, 15 cubic centimeters..... | 4.08 |
| 24 glass-stoppered bottles, 200 cubic centimeters..... | 3.13 |
| 4 battery zincs..... | 2.00 |
| Kymograph parts..... | 5.00 |
| 1 wooden stand..... | .90 |
| 10 capillary electrometers..... | 30.00 |
| 1 old circular scheme..... | 5.50 |
| 11 rheodords, old style..... | 17.60 |
| 1 box nonpolarizable electrodes..... | 5.00 |
| 3 head holders..... | 3.00 |
| 8 large corks..... | .25 |
| 8 brass rods..... | .25 |
| 5 crystal dishes, 15 centimeters..... | 1.75 |
| 11 crystal dishes, 10 centimeters..... | 2.20 |
| 11 crystal dishes, 8 centimeters..... | 1.54 |
| 3 apparatus cores..... | 60.00 |
| 1 table with drawers..... | 30.00 |
| 6 boards, hard and soft wood..... | 5.00 |
| 1 thermostat with regulator (old)..... | 35.00 |
| 1 stool..... | 1.00 |
| 1 fire extinguisher..... | 5.00 |
| 1 thermostat, divided doors, etc..... | 72.00 |
| 1 heavy laboratory table..... | 10.00 |
| 1 light laboratory table..... | 4.00 |
| 1 demonstration tray..... | 2.00 |
| 1 hand centrifuge with fixings..... | 15.00 |
| 7 circulation schemes..... | 38.50 |
| 1 papier-maché spinal cord..... | 5.00 |
| 1 papier-maché ear..... | 5.00 |
| 1 bell jar with tubulature, 22 by 40 centimeters..... | 3.00 |
| 12 test tube holders..... | .78 |
| 8 tripods..... | 2.00 |
| 3 Bunsen burners..... | 1.05 |
| 8 Daroll clamps..... | 1.60 |
| 98 test tubes..... | 1.35 |
| 1 test tube rack for 12 test tubes..... | .60 |
| $\frac{1}{2}$ bottle mucilage..... | .40 |
| 5 eye boxes..... | 20.00 |
| 5 lanterns..... | 25.00 |
| 1 set Milton Bradley pseudoptics..... | 5.00 |
| 1 Zaye Kuhne artificial eye..... | 25.00 |
| 1 set keenness of vision instruments..... | 10.00 |
| 1 set (19) bottles with odoriferous solutions..... | 3.80 |
| 4 bottles, glass stoppered, 30 cubic centimeters..... | .28 |
| 20 bottles, glass stoppered, 100 cubic centimeters..... | 2.00 |
| 4 bottles, glass stoppered, 200 cubic centimeters..... | .52 |
| 5 beakers, 75 cubic centimeters..... | .50 |
| 1 set colored..... | 1.60 |

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| 1 kymograph..... | \$20. 00 |
| 4 crystal dishes, 8 centimeters..... | .56 |
| 1 crystal dish, 10 centimeters..... | .20 |
| 1 tracheal canula..... | .70 |
| 1 cat orx..... | 1. 00 |
| 1 mercury manometer..... | 2. 50 |
| 1 standard and 2 clamps..... | 1. 15 |
| 2 pump models..... | 1. 50 |
| 23 small lamborns..... | 23. 00 |
| 23 head levers..... | 17. 25 |
| 12 nicked brass rods..... | 2. 40 |
| 1 tuning fork..... | 1. 00 |
| 3 head clamps..... | 2. 25 |
| 2 zootrope pictures of intestinal membranes..... | 2. 00 |
| 1 stool..... | 1. 00 |
| 14 record holders..... | 3. 50 |
| 5 slop bowls..... | 1. 25 |
| 1 shellacking table..... | 5. 00 |
| 1 battery jar..... | .25 |
| 2 waste-paper baskets..... | 1. 00 |
| 6 chairs..... | 7. 50 |
| 21 stoves..... | 21. 00 |
| 1 glass-stoppered bottle, 100 cubic centimeters..... | .10 |
| 20 kymographs..... | 400. 00 |
| 1 ice chamber..... | .65 |
| 1 CO ₂ chamber..... | .35 |
| 1 arbeit saunnler..... | 3. 00 |
| 1 micrometer eyepiece..... | 5. 00 |
| 1 microscope capillary electrometer..... | 3. 00 |
| 1 interrupter..... | 4. 00 |
| 8 volume tubes..... | 3. 60 |
| 6 sets large electrodes..... | 1. 50 |
| 12 new holders..... | 4. 80 |
| 1 Bunsen burner with 2 feet tubing..... | .35 |
| 4 desks of 4 places each..... | 120. 00 |
| 22 platinum electrodes..... | 22. 00 |
| 3 current detectors..... | 4. 50 |
| 1 blackboard..... | 2. 00 |
| 4 eyographs..... | 6. 00 |
| 6 tuning forks..... | 6. 00 |
| 19 electro-magnetic signals..... | 19. 00 |
| 21 femur clamps..... | 21. 00 |
| 19 muscle levers..... | 21. 85 |
| 21 inductoriums..... | 147. 00 |
| 22 simple keys..... | 22. 00 |
| 4 interrupters..... | 6. 00 |
| 3 mercury keys..... | 3. 00 |
| 18 boards..... | 10. 80 |
| 13 wooden stands..... | 11. 70 |
| 1 circulation scheme..... | 5. 50 |
| 1 pole changer..... | 2. 25 |
| 1 rheocord..... | 2. 50 |
| 19 glass plates..... | 1. 90 |
| 1 bottle with 2 dozen aluminum styles..... | 1. 30 |
| 1 bottle with 100 10-gram weights..... | 1. 10 |
| 1 pan with 100 10 gram weights..... | 1. 10 |
| 1 bottle with 30 double hooks..... | .55 |
| 1 bottle with 30 leg clips..... | .70 |
| 9 weight pans..... | 2. 25 |
| 1 blackboard and bulletin board..... | 2. 00 |
| 1 apparatus case..... | 20. 00 |
| 1 cabinet..... | 3. 00 |
| 1 standard..... | .75 |
| 3 double clamps..... | .60 |
| 1 simple key..... | 1. 00 |
| 1 induction..... | 7. 00 |
| 1 dry cell..... | .20 |

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| 1 tripod..... | \$0. 25 |
| 1 wooden stand..... | .90 |
| 1 beaker, 1,000 cubic centimeters..... | .50 |
| 1 flat-bottom flask, 500 cubic centimeters..... | .28 |
| 1 microscope, 3 x 7 objectives..... | 33. 50 |
| 1 kymograph..... | 20. 00 |
| 9 glass-stoppered bottles, 15 cubic centimeters..... | .54 |
| 2 glass-stoppered bottles, 30 cubic centimeters..... | .14 |
| 3 glass-stoppered bottles, 100 cubic centimeters..... | .30 |
| 2 glass-stoppered bottles, 200 cubic centimeters..... | 1. 26 |
| 1 thermometer, 0-110°..... | 1. 10 |
| 1 funnel, 5 centimeters..... | .09 |
| 1 beaker, 50 cubic centimeters..... | .10 |
| 1 crystal dish, 8 centimeters..... | .14 |
| 1 crystallizing dish, 10 centimeters..... | .20 |
| 1 evaporating dish, 7 centimeters..... | .16 |
| 10 watch glasses, 5 centimeters..... | .20 |
| 1 platinum electrode..... | 1. 00 |
| 1 muscle lever..... | 1. 15 |
| 1 femur clamp..... | 1. 00 |
| 1 head lever..... | .75 |
| 1 pipette, 1 cubic centimeter..... | .05 |
| 1 test-tube holder..... | .07 |
| 10 10-gram weights..... | .10 |
| 1 glass plate..... | .10 |
| 1 blackboard..... | 10. 00 |
| 1 curtain for lantern..... | 5. 00 |
| 2 stools..... | 2. 00 |
| 64 chairs..... | 64. 00 |
| 1 Laclare desk..... | 10. 00 |
| 1 chair..... | 1. 50 |
| 1 chair cabinet..... | 25. 00 |
| 1 chair..... | 1. 50 |
| 144 12-centimeter test tubes..... | 1. 95 |
| 3 crystallizing dishes, 15 centimeters..... | 1. 05 |
| 22 crystallizing dishes, 10 centimeters..... | 4. 40 |
| 54 crystallizing dishes, 8 centimeters..... | 7. 56 |
| 30 crystallizing dishes, 5 centimeters..... | 3. 60 |
| 1 funnel, 13 centimeters..... | .20 |
| 1 funnel, 10 centimeters..... | .16 |
| 3 funnels, 9 centimeters..... | .45 |
| 8 funnels, 6 centimeters..... | .80 |
| 14 funnels, 5 centimeters..... | 1. 26 |
| 6 funnels, 3 centimeters..... | .48 |
| 200 watch glasses, 3 centimeters..... | 4. 00 |
| 50 watch glasses, 5 centimeters..... | 1. 00 |
| 46 watch glasses, 6 centimeters, with facet..... | 2. 07 |
| 1 watch glass, 7 centimeters..... | .05 |
| 7 watch glasses, 10 centimeters..... | .46 |
| 4 watch glasses, 16 centimeters..... | .96 |
| 3 sediment glasses..... | .38 |
| 3 sediment glasses..... | .42 |
| 3 watch glasses, 18 centimeters..... | .78 |
| 2 watch glasses, 20 centimeters..... | .56 |
| 1 wash bottle, 250 cubic centimeters, ground stopper..... | 2. 50 |
| 2 burette clamps..... | 1. 50 |
| 22 test-tube clamps..... | 1. 43 |
| 1 beaker brush..... | .15 |
| 9 test-tube brushes..... | .54 |
| 11 pipestem triangles..... | .99 |
| 3 porcelain boats..... | .40 |
| 9 porcelain crucibles..... | .90 |
| 2 separating funnels, short stems (100 cubic centimeters)..... | 2. 40 |
| 1 evaporating dish, 30 centimeters..... | 1. 75 |
| 1 evaporating dish, 22 centimeters..... | 1. 25 |
| 2 evaporating dishes, 18 centimeters..... | 2. 50 |
| 3 evaporating dishes, 16 centimeters..... | 1. 95 |

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| 5 evaporating dishes, 13 centimeters..... | \$1. 50 |
| 1 evaporating dish, 11 centimeters..... | . 25 |
| 6 evaporating dishes, 8 centimeters..... | 1. 08 |
| 1 bell jar with tubulature..... | 2. 85 |
| 1 crockery ware dipping basket..... | 1. 00 |
| 1 3-gallon crock..... | . 50 |
| 1 color mixer with color wheels..... | 10. 00 |
| 62 glass-stoppered bottles, 30 cubic centimeters..... | 4. 34 |
| 5 glass-stoppered bottles, wide mouth, 30 cubic centimeters..... | . 35 |
| 4 glass-stoppered bottles, wide mouth, 100 cubic centimeters..... | . 40 |
| 2 glass-stoppered bottles, with wide mouth..... | . 26 |
| 20 bottles, 200 cubic centimeters..... | 2. 60 |
| 139 glass-stoppered bottles, 15 cubic centimeters..... | 8. 34 |
| 1 separating funnel, long stem, 50 cubic centimeters..... | 1. 00 |
| 1 thistle tube..... | . 06 |
| 2 calcium chloride tubes..... | . 50 |
| 3 drying tubes..... | . 75 |
| 4 weighing bottles, 8 by 4 centimeters; 3 weighing bottles, 6 by 3 centimeters..... | 1. 25 |
| 10 Erlenmeyer flasks, 600 cubic centimeters..... | 2. 00 |
| 2 Erlenmeyer flasks, 300 cubic centimeters..... | . 32 |
| 1 Erlenmeyer flask, 200 cubic centimeters..... | . 12 |
| 2 Erlenmeyer flasks, 100 cubic centimeters..... | . 18 |
| 3 Erlenmeyer flasks, 50 cubic centimeters..... | . 24 |
| 1 heavy filtering flask..... | . 80 |
| 1 accurate flask, 500 cubic centimeters..... | . 95 |
| 2 accurate flasks, 200 cubic centimeters..... | . 80 |
| 1 round-bottom flask, 200 cubic centimeters..... | . 12 |
| 7 K glass tubing and glass rod..... | 7. 00 |
| 2 wooden standards..... | 2. 00 |
| 24 tin boxes, 10 centimeters..... | . 57 |
| 35 tin boxes, 6 centimeters..... | . 50 |
| 1 specimen jar, 12 centimeters..... | . 35 |
| 3 specimen jars, 10 centimeters..... | . 75 |
| 1 aspirator bottle, 2 gallons..... | 1. 30 |
| Rubber stoppers..... | 3. 00 |
| 1 box color wheels with color mixer..... | |
| 15 bottles ether, 250 grams each..... | 6. 00 |
| 24 pipette nipples..... | . 36 |
| 12 small thistle tubes..... | . 60 |
| 2 clamps, 15 centimeters..... | 1. 00 |
| 12 evaporating dishes, 6.5 centimeters..... | 1. 80 |
| 1 milk tester..... | . 60 |
| 1 spinthariscopes..... | 1. 25 |
| Platinum wire..... | 2. 00 |
| 12 cork boards, 10 by 30 centimeters..... | 1. 80 |
| 1 specific-gravity instrument, 800-900..... | . 75 |
| 1 specific-gravity instrument, 700-800..... | . 75 |
| 1 specific-gravity instrument, 900-1,000..... | . 75 |
| 5 thermometers, 0-250° C..... | 2. 00 |
| 3 bottles chloroform, ½ pound each..... | 1. 25 |
| 5 pounds mercury..... | 4. 50 |
| 1 dynamometer oral..... | 2. 85 |
| 1 rheocord..... | 2. 50 |
| 5 vials litmus paper..... | . 35 |
| 1 vial lacmoid paper..... | . 07 |
| 1 straight graduate, 1,000 cubic centimeters..... | 2. 00 |
| 1 straight graduate, 500 cubic centimeters..... | 1. 05 |
| 1 straight graduate, 250 cubic centimeters..... | . 85 |
| 1 accurate flask, 1,000 cubic centimeters..... | 1. 00 |
| 1 bell jar, 11 by 25..... | 1. 00 |
| 1 bell jar, 13 by 30..... | 1. 25 |
| 1 Sahli holimeter..... | 3. 75 |
| 1 contact clock..... | 8. 00 |
| 1 metronome, W contact..... | 10. 00 |
| 1 package B. & A. filters, 125 centimeters..... | . 75 |
| 4 boxes labels..... | . 20 |

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| 5 boxes labels..... | \$0.25 |
| 1 percussion hammer..... | .30 |
| 1 stethoscope..... | 1.00 |
| 2 round-bottom flasks, 1,000 cubic centimeters..... | .40 |
| 2 Leibig condensers, 80 centimeters..... | 1.20 |
| 2 Leibig condensers, 60 centimeters..... | 1.00 |
| 2 specific-gravity jars, 30 centimeters, eng..... | .50 |
| 2 specific-gravity jars, 25 centimeters..... | .50 |
| 1 platinum electrode..... | 1.00 |
| 1 rubber stamp and pad..... | .75 |
| 1 stand semicircular bar..... | .75 |
| Iron wire..... | 1.00 |
| 13 standards..... | 9.75 |
| 1 mortar and pestle, 20 centimeters..... | 1.35 |
| 1 mortar and pestle, 11 centimeters..... | .45 |
| 1 agate mortar and pestle, 4 centimeters..... | 1.30 |
| 6 pipettes, 1 cubic centimeter..... | .30 |
| 18 pipettes, 2 cubic centimeters..... | 1.08 |
| 2 E. & A. filter pumps..... | 2.00 |
| 1 Richards filter pump..... | 1.20 |
| 10 iron gauze..... | .50 |
| 5 glass plates..... | .50 |
| 16 cardboard boxes, 5 by 9 centimeters..... | .48 |
| 4 aneurism needles..... | 1.65 |
| 1 scissors..... | .50 |
| 2 tracheal cannulæ..... | 1.40 |
| 8 metal arterial cannulæ..... | 1.20 |
| 1 bellows..... | 1.00 |
| 1 animal board and head holder..... | 5.50 |
| 1 anæsthetic bottle..... | .25 |
| 1 calcium chloride..... | .20 |
| 1 pinchcock..... | .10 |
| 10 frog manometers..... | 10.00 |
| 1 safety burner..... | 1.25 |
| 1 membrane manometer..... | 5.00 |
| 4 respiration schemes..... | 10.00 |
| 1 Cessabane shears..... | 2.50 |
| 3 needles..... | .75 |
| 6 packages screws ($\frac{3}{8}$, $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$, and 1 inch)..... | 2.00 |
| 3 packages brads ($\frac{3}{4}$, 1, and $1\frac{1}{4}$ inches)..... | .75 |
| 8 sheets emery cloth..... | .80 |
| 8 sheets sandpaper..... | .40 |
| 1 bench vise..... | 2.40 |
| 1 claw hammer..... | .38 |
| 1 straight hammer..... | .47 |
| 2 screw-drivers..... | .42 |
| 1 pendulum pliers..... | .74 |
| 1 end-cutting pliers..... | .54 |
| 1 micrometer gauge..... | 4.20 |
| 1 straight-cut saw..... | 1.25 |
| 1 wrench..... | .52 |
| 1 plane, hand..... | .90 |
| Lead..... | 1.10 |
| Wire..... | .26 |
| Rasp..... | .16 |
| 11 moist chamber..... | 27.50 |
| 1 simplex spirometer..... | 5.20 |
| 2 Smellie wall charts..... | .20 |
| 1 sterilizer..... | 15.00 |
| 11 beakers, 75 cubic centimeters..... | 1.10 |
| 5 beakers, 700 cubic centimeters..... | 1.25 |
| 5 beakers, 500 cubic centimeters..... | 1.10 |
| 5 beakers, 300 cubic centimeters..... | .90 |
| 3 beakers, 250 cubic centimeters..... | .45 |
| 6 beakers, 200 cubic centimeters..... | .90 |
| 5 beakers, 150 cubic centimeters..... | .60 |
| 8 beakers, 100 cubic centimeters..... | .96 |

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| 1 beaker, 75 cubic centimeters..... | \$0. 10 |
| 1 beaker, 50 cubic centimeters..... | . 08 |
| 1 beaker, 1,000 cubic centimeters..... | . 40 |
| 1 beaker, 1,200 cubic centimeters..... | . 40 |
| 1 nest long form beakers (5)..... | 1. 00 |
| 1.7 kilos rubber stoppers..... | 6. 50 |
| 1 straight graduate, 200 cubic centimeters..... | . 70 |
| 1 straight graduate, 100 cubic centimeters..... | . 60 |
| 1 straight graduate, 50 cubic centimeters..... | . 40 |
| 1 straight graduate, 25 cubic centimeters..... | . 35 |
| 2 burettes, 3-way..... | 8. 40 |
| 2 burettes, simple..... | 3. 60 |
| 1 thermostat regulator..... | 1. 05 |
| 180 10-gram weights..... | 1. 80 |
| 5 gas chambers..... | 1. 75 |
| 100 double hooks..... | 1. 50 |
| 1,000 sheets kymograph paper..... | 5. 00 |
| 12 paper protractors..... | . 30 |
| 2 meter rules..... | . 40 |
| 3 pneumographs..... | 7. 80 |
| 6 signal magnets..... | 6. 00 |
| 6 large tambours..... | 9. 00 |
| 6 tuning forks..... | 6. 00 |
| 6 muscle warmers..... | 3. 90 |
| 3 eyographs..... | 4. 50 |
| 2 wooden funnel stands..... | 2. 50 |
| 37 iron stands, semicircular bars..... | 27. 75 |
| 43 double clamps, small..... | 8. 60 |
| 5 clamps, 5 centimeters..... | 2. 50 |
| 8 burette clamps..... | 6. 00 |
| 15 clamps, double, large..... | 5. 00 |
| 4 Bunsen burners..... | 1. 40 |
| 1 laboratory apron..... | 1. 40 |
| 3 kilos combustion tubing, 13 millimeters..... | 4. 20 |
| 2 kilos Kavalier glass tubing, 4 millimeters; 2 kilos Kavalier glass tubing, 5 millimeters; 1 kilo Kavalier glass tubing, 6 millimeters; 1 kilo Kavalier glass tubing, 10 millimeters..... | 8. 40 |
| 1 kilo glass blowing tubing, 20 millimeters; 1.5 kilos glass blowing tubing, 30 millimeters..... | 2. 25 |
| 1 kilo glass rod, 4 millimeters; 1 kilo glass rod, 5 millimeters; 1 kilo glass rod, 6 millimeters..... | 2. 40 |
| 26 distillation flasks, 100 cubic centimeters..... | 6. 50 |
| 20 distillation flasks, 250 cubic centimeters..... | 6. 00 |
| 3 distillation flasks, 500 cubic centimeters..... | 1. 20 |
| 2 distillation flasks, 1,000 cubic centimeters..... | 1. 10 |
| 2 distillation flasks, 100 cubic centimeters; 3 distillation flasks, 250 cubic centimeters; 2 distillation flasks, 500 cubic centimeters; 3 Kavalier round bottom flasks, 250 cubic centimeters..... | . 42 |
| 8 Kavalier round bottom flasks, 500 cubic centimeters..... | 1. 60 |
| 7 Kavalier round bottom flasks, 1,000 cubic centimeters..... | 2. 10 |
| 3 Kavalier round bottom flasks, 2,000 cubic centimeters..... | 1. 50 |
| 3 Kavalier round bottom flasks, 4,000 cubic centimeters..... | 3. 00 |
| 1 Buechner funnel, 10 centimeters..... | 1. 25 |
| 1 Buechner funnel, 25 centimeters..... | 2. 50 |
| 1 Scherbler dessicator, 24 centimeters..... | 4. 00 |
| 1 Fruhling Schutz dessicator..... | 6. 50 |
| 1 Plantamour funnel..... | 2. 00 |
| 1 potassium hydroxide..... | 1. 00 |
| 1 Schiff nitrometer..... | 5. 00 |
| 1 separating funnel, 2,000 cubic centimeters..... | 3. 00 |
| 4 each of red and blue litmus paper in vials..... | . 56 |
| 1 Sartorius balance, 200 grams to 0.1 milligram; 1 set gilded weights, 200 grams to 0.1 milligram..... | 46. 00 |
| 2 parchment paper..... | . 70 |
| 1 bottle emery, No. 70..... | . 20 |
| 1 bottle emery, No. 100..... | . 20 |
| 1 bottle emery, No. 140..... | . 20 |

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| 1 bottle emery powder..... | \$0. 20 |
| 1 crystallizing dish..... | . 35 |
| 2 kilos acetone..... | 2. 00 |
| 3 kilos acetone..... | 2. 65 |
| 250 grams toluene..... | . 28 |
| 1 kilo chloroform..... | 1. 00 |
| $\frac{1}{2}$ kilo acetic anhydride..... | 1. 00 |
| 2 kilos lactic acid..... | 3. 10 |
| 100 grams propionic acid..... | 1. 20 |
| 100 grams pyndine..... | 1. 75 |
| 500 grams phosphorous thichloride..... | 1. 20 |
| 500 grams stannic chloride..... | 1. 10 |
| 500 grams acetyl chloride..... | 2. 20 |
| 500 grams benzoyl chloride..... | 1. 10 |
| Red phosphorus..... | 1. 15 |
| 1 water bath with tripod..... | 3. 25 |
| 3 porcelain dishes, No. 7..... | 1. 00 |
| 2 porcelain dishes, No. 8..... | 1. 24 |
| 1 porcelain dish, No. 11..... | 1. 30 |
| 1 2-gallon condenser Zn., with tin tube..... | 3. 65 |
| 2 filter pumps, No. 1, E. & A..... | 1. 80 |
| 1 filter pump, No. 2..... | 1. 10 |
| 5 pounds sea sand..... | . 20 |
| 1 iron stand..... | . 65 |
| 3 kilos glacial acetic acid..... | 1. 60 |
| $\frac{1}{2}$ pound sodium..... | . 50 |
| $\frac{1}{2}$ kilo ammon. nitrate..... | . 33 |
| 500 grams calcium chloride, dry gran..... | . 30 |
| 500 grams zinc dust..... | . 25 |
| 2 kilos zinc, granulated..... | 1. 30 |
| 3 kilos oxalic acid..... | . 65 |
| 2 8-ounce Drexel gas wash bottles..... | . 67 |
| 2 500 cubic centimeter Erlenmeyer filtering flasks..... | . 25 |
| 1 50 cubic centimer long-stem separatory funnel..... | . 30 |
| 1 500 cubic centimeter short-stem separatory funnel..... | 1. 80 |
| 1 100 cubic centimeter Kipp generator..... | 1. 35 |
| 500 grams molybdic acid..... | 1. 30 |
| 100 grams naphthol..... | . 22 |
| 100 grams potass. ferrocyanide..... | . 15 |
| 100 grams potass. ferricyanide..... | . 15 |
| 500 grams potass. and sod. tartrate..... | . 29 |
| 500 grams barium chloride..... | . 22 |
| 500 grams barium hydroxide..... | . 30 |
| 3 kilos sodium hydroxide fused..... | . 45 |
| 5 kilos benzoic acid from toluene..... | 6. 75 |
| 500 grams urea..... | 1. 95 |
| 1 kilo citric acid..... | 1. 40 |
| 2 kilos glycerin..... | . 95 |
| 2 kilos boneblack..... | . 65 |
| 10 grams phloroglucin..... | 1. 10 |
| 1.5 kilos salicylic acid..... | 1. 50 |
| 3 kilos tartaric acid..... | 2. 85 |
| 1.5 kilos ammon. carbonate..... | . 58 |
| Antimony trichloride..... | . 80 |
| 500 grams barium carbonate..... | . 15 |
| 500 grams cadium chloride..... | 2. 10 |
| Calcium chloride, fused gran..... | . 60 |
| 500 grams ferrous sulphate..... | . 15 |
| 2 kilos ferrous sulphate..... | . 20 |

LOANED TO THE DEPARTMENT OF PHYSIOLOGICAL CHEMISTRY.

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| 500 grams sodium methate, dry..... | . 15 |
| Potas. bromide..... | . 50 |
| 1 kilo potas. carbonate..... | . 30 |
| 1 kilo potassium hydroxide..... | . 68 |
| 500 grams potassium nitrate..... | . 16 |

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| 300 grams potassium permanganate..... | \$0. 25 |
| 500 grams cupric chloride..... | 1. 10 |
| 2 kilos potassium sulphate..... | . 57 |
| 500 grams cupric oxide, powder..... | 1. 05 |
| 2 kilos cupric oxide, granular..... | 3. 75 |
| 500 grams cupric sulphate..... | . 30 |
| 100 grams lithium chloride..... | . 35 |
| 100 grams magnesium ribbon..... | 1. 00 |
| 500 grams magnesium chloride..... | . 15 |
| 500 grams manganese chloride..... | . 27 |
| 3 kilos sodium carbonate, dry..... | 1. 00 |
| 500 grams sodium chloride..... | . 15 |
| 1.5 kilos sodium hydroxide..... | 2. 25 |
| 500 grams sodium sulphate, fused..... | . 45 |
| 200 grams phosphorous oxide..... | . 50 |
| 100 grams bismuth trichloride..... | 1. 30 |
| 100 grams tungstic acid..... | . 90 |
| 500 grams zinc chloride..... | . 33 |
| 500 grams stannous chloride..... | . 60 |
| 1 iron pail..... | . 90 |
| 1 milk can (fitted)..... | 1. 50 |
| 1 platinum crucible (perforated)..... | 30. 00 |
| 1 platinum crucible (solid)..... | 22. 50 |
| 1 Buechner funnel, 7-centimeter..... | . 45 |

Total..... 3, 186. 88

Bacteriological and pathological laboratory.

Bacteriological and pathological laboratory, 50 by 48 feet; accessory laboratory, 9 by 11 feet.

Students enrolled for work in this laboratory this year:

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| Medical students..... | 57 |
| Special students..... | 4 |
| Veterinary students..... | 27 |
| Dental students..... | 6 |
| | 94 |
| Number of students that can be accommodated..... | 100 |

Inventory.

Laboratory tables for 73 students, fully equipped with gas, electric lights, burners, water fixtures, plumbing, and drawers.

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| 1 auto clave..... | \$60. 00 |
| 1 alcoholometer..... | 1. 50 |
| 5 pieces asbestos board, 1 sheet..... | 3. 00 |
| 1 yard asbestos cloth..... | 2. 00 |
| 4½ pounds asbestos, shredded..... | 6. 75 |
| 511 bottles, Boston prescription..... | 40. 88 |
| 1 albumenometer, Esbach..... | 1. 00 |
| 91 blocks, vulcanized..... | 3. 50 |
| 14 beakers, Jena..... | 1. 40 |
| 436 bottles, glass stopper..... | 21. 80 |
| 100 bottles, stain, small..... | 6. 00 |
| 226 bottles, stain..... | 18. 08 |
| 134 bottles, stain, German..... | 4. 02 |
| 105 bottles, balsam..... | 12. 60 |
| 29 bottles, cedar oil..... | 3. 48 |
| 532 bottles, specimen, 100 cubic centimeters..... | 53. 20 |
| 13 bottles, glass stopper, 8 L..... | 13. 00 |
| 36 brushes, bottle, 12-inch..... | 7. 20 |
| 36 brushes, bottle, 15-inch..... | 7. 56 |
| 33 brushes, bottle, 20-inch..... | 8. 25 |

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| 2 burettes, stands, porcelain base..... | \$2. 00 |
| 1 blowpipe, Fletcher's | 5. 00 |
| 2 burettes, single cock, 25 cubic centimeters..... | . 30 |
| 2 burettes, two-way, 50 cubic centimeters..... | 3. 00 |
| 2 burettes, two-way, 100 cubic centimeters..... | 4. 00 |
| 2 bell jars, with tabulature..... | 4. 00 |
| 8 baths, copper, 8-inch..... | 16. 00 |
| 1 bath, copper, 5-inch..... | 1. 50 |
| 1 paraffin bath..... | 15. 00 |
| 1 bottle, Woolfe..... | . 50 |
| 1 bottle, hydrogen..... | 3. 00 |
| 1 bottle, wash glass | . 25 |
| 6 boxes embedding | . 60 |
| 4 burners, Bunsen, 3-tube..... | 4. 00 |
| 1 burner, Bunsen, 3-tube, large..... | 1. 50 |
| 1 burner, Bunsen, large..... | . 75 |
| 2 burners, Fletcher, solid flame..... | 4. 00 |
| 2 burners, Kock, safety..... | 12. 00 |
| 80 burners, Bunsen, single..... | 20. 00 |
| 1 bottle, specific gravity and weight..... | 2. 50 |
| 11 bulbs, large..... | |
| 24 bulbs, small..... | |
| 4 cylinders, graduated, 1,000..... | 4. 00 |
| 3 cylinders, graduated, 500..... | 2. 25 |
| 4 cylinders, graduated, 250..... | 2. 40 |
| 12 cylinders, graduated, 100..... | 4. 20 |
| 11 cylinders, graduated, 50..... | 3. 30 |
| 8 cylinders, graduated, 25..... | 1. 60 |
| 10 cylinders, graduated, 10..... | 1. 50 |
| 5 cylinders, graduated, 5..... | . 60 |
| 1 cylinder, graduated, not good..... | |
| Corks, assorted, 0-22..... | |
| Corks, rubber, 3..... | |
| Corks, rubber, 6..... | |
| Corks, rubber, 8..... | |
| Corks, rubber, 9..... | |
| Corks, rubber, 12..... | |
| 1 cork borer..... | 2. 00 |
| 1 cork borer knife..... | . 75 |
| 1 corkscrew | . 10 |
| 4 crucibles..... | . 40 |
| 8½-ounce cover glasses, round..... | 8. 50 |
| 14-ounce cover glasses, square, $\frac{3}{4}$ by $\frac{3}{4}$ | 14. 00 |
| 2-ounce cover glasses, $\frac{3}{4}$ by $1\frac{1}{4}$ | 2. 00 |
| 1-ounce cover glasses, 35 by 50..... | 1. 00 |
| 6 clamps, tubing, medium..... | . 90 |
| 6 clamps, tubing, small..... | . 90 |
| 29 colony counting plates..... | 29. 00 |
| 1 condenser, Leibig..... | 2. 50 |
| 1 condenser, alcohol..... | 2. 50 |
| 1 centrifuge, hospital size, 110-volt, with 4 and 8 tube head, 8 aluminum tubes, 12 plain tubes, 6 graduated tubes, rheostat..... | 85. 00 |
| 1 can or boiler..... | . 50 |
| 1 cage, special metal..... | 2. 50 |
| 1 cage, wooden..... | 1. 50 |
| 1 cage, mouse..... | 1. 00 |
| 5 chambers, drying..... | 5. 00 |
| 1 centrifuge, small electric..... | 15. 00 |
| 494 dishes, staining..... | 39. 52 |
| 22 dishes, staining with g. g. top..... | 2. 20 |
| Dishes, evaporating..... | |
| 1 dish, glass, 10 inches..... | . 20 |
| 1 dish, glass, 8 inches..... | . 20 |
| 6 dishes, glass, 6 inches..... | 1. 20 |
| 264 dishes, Petri..... | 31. 68 |
| 1 dark ground illuminator, Leitz..... | 16. 00 |
| 2 diamanture powder..... | |

| | |
|---|------------|
| 144 funnels, 2 inches..... | \$7. 20 |
| 5 funnels, 3 inches..... | . 15 |
| 4 funnels, 4 inches..... | . 24 |
| 1 funnel, 5 inches..... | . 10 |
| 13 funnels, 6 inches..... | 2. 60 |
| 5 funnels, $\frac{1}{2}$ gallon, ribbed..... | 6. 25 |
| 2 funnels, Buchner..... | 2. 50 |
| 3 funnels, agate..... | . 75 |
| 2 funnel racks, wire..... | . 30 |
| 15 flasks, toxin, 10 inches..... | 15. 00 |
| 35 flasks, Erlenmeyer, 150 cubic centimeters..... | 5. 25 |
| 99 flasks, Erlenmeyer, 300 cubic centimeters..... | 19. 80 |
| 21 flasks, Erlenmeyer, 500 cubic centimeters..... | 4. 62 |
| Flasks, Erlenmeyer, 250 cubic centimeters..... | |
| 88 flasks, Erlenmeyer, 1,000 cubic centimeters..... | 35. 20 |
| 16 flasks, Erlenmeyer, 1,500 cubic centimeters..... | 9. 60 |
| Flasks, Erlenmeyer, 100 cubic centimeters..... | |
| 50 flasks, Florentine, 250 cubic centimeters..... | 10. 00 |
| 47 flasks, Florentine, 500 cubic centimeters..... | 11. 75 |
| 22 flasks, Florentine, 1,500 cubic centimeters..... | 13. 20 |
| 6 flasks, filtering Erlenmeyer..... | 3. 60 |
| 8 flasks, filtering round..... | 4. 80 |
| 18 filters, Berkefeld..... | 27. 00 |
| 9 filters, Pukal..... | 13. 50 |
| 1 filtering tube..... | 1. 00 |
| 28 frog plate glass..... | 2. 80 |
| 56 frog plate cork..... | 5. 60 |
| 58 forceps, dissecting..... | 11. 60 |
| 9 forceps, long, for specimens..... | 4. 50 |
| 24 forceps, comet..... | 12. 00 |
| 129 forceps, Stewart's..... | 19. 35 |
| 3 files, saw..... | . 30 |
| 183 fermentation tubes, on foot..... | 45. 75 |
| Graduates, 150 cubic centimeters..... | |
| 1 graduate, 60 cubic centimeters..... | . 20 |
| 5 graduates, 120 cubic centimeters..... | 1. 25 |
| 6 graduates, clinical, 250 cubic centimeters..... | 1. 80 |
| 2 gas stoves..... | 4. 00 |
| 1 glass plate for microtome..... | 1. 00 |
| 2 hæmoglobinometer, Dare..... | 40. 00 |
| 1 hæmoglobinometer, Fleische..... | 15. 00 |
| 2 hæmocytometer, Zirm..... | 24. 00 |
| 3 incubators..... | 250. 00 |
| Instruments, surgical and post mortem: 1 brain knife, 1 bone forceps, 1 bone-cutting forceps, 1 bone chisel, 1 centeretone, 1 hammer, 2 knives, 1 scissors, 1 trocar and cannula..... | 20. 00 |
| 84 jars, specimen, 1 quart..... | 12. 60 |
| 46 jars, specimen, 1 pint..... | 4. 60 |
| 6 jars, stone, with lid, 2 gallons..... | 6. 00 |
| 1 jar, stone lid, 3 gallons..... | 1. 10 |
| 1 jar, stone, with lid, 5 gallons..... | 1. 25 |
| 24 jars, specimen, 20 by 10 by 5..... | 24. 00 |
| 24 jars, specimen, 20 by 15 by 8..... | 28. 80 |
| 6 jars, precipitating..... | 6. 00 |
| 2 jars, Annærobo Novy..... | 8. 00 |
| 1 knife, microtonie, B. & L..... | 5. 00 |
| 2 knives, microtonie..... | 10. 00 |
| 2 knives for Bardeens freezing Mic..... | 2. 00 |
| 13 lantern slides..... | 6. 50 |
| 3 lenses, hand..... | . 75 |
| 1 level..... | 1. 00 |
| 59 lenses, microscope, Leitz $\frac{1}{2}$ oil immersion..... | 1, 500. 00 |
| 2 lenses, microscope, Spencer $\frac{1}{2}$ oil immersion..... | 50. 00 |
| 14 lenses, microscope, B. & L. $\frac{1}{2}$ oil immersion..... | 325. 00 |
| 70 lenses, microscope, B. & L. $\frac{3}{4}$ oil immersion..... | 505. 00 |
| Lenses, microscope, B. & L. $\frac{1}{2}$ oil immersion..... | 595. 00 |
| 1 ladle, tin..... | . 10 |

| | |
|---|------------|
| 1 measure, agate, $\frac{1}{2}$ gallon..... | \$0. 25 |
| 1 measure, agate, 1 quart..... | . 15 |
| 1 measure, agate, 1 pint..... | . 10 |
| 1 mortar, glass..... | . 50 |
| 2 mortars, porcelain..... | . 80 |
| 1 microtome, Schanze..... | 50. 00 |
| 1 microtome, Minot..... | 60. 00 |
| 1 microtome, freezing..... | 20. 00 |
| 1 mouse holder..... | 1. 00 |
| 1 microscope case for specimens..... | 35. 00 |
| 48 microscope stands, black base, eyepiece, triple nose piece, Abbe condenser, Leitz..... | 1, 500. 00 |
| 14 microscope stands, black base, 1 eye piece, double nose piece, Abbe condenser, B. & L..... | 420. 00 |
| 2 microscope stands, 2 eyepieces, triple nose piece, Abbe condenser, Spencer | 60. 00 |
| 1 micrometer, metric..... | 1. 50 |
| 14 needles, teasing..... | 2. 10 |
| 16 needles, teasing, with hook..... | 2. 40 |
| 90 needles, inoculating, platinum..... | 13. 50 |
| 100 needles, glass..... | 5. 00 |
| 5 platino-iridium wire..... | 12. 50 |
| 2 platinum..... | 20. 00 |
| 122 pipettes, bulbous, 1 cubic centimeter..... | 6. 10 |
| 55 pipettes, bulbous, 2 cubic centimeters..... | 5. 50 |
| 28 pipettes, bulbous, 5 cubic centimeters..... | 2. 80 |
| 21 pipettes, bulbous, 10 cubic centimeters..... | 3. 15 |
| 1 pipette, bulbous, 20 cubic centimeters..... | . 25 |
| 1 pot, iron..... | . 50 |
| 15 pinch cocks, Mohr, large and medium..... | . 75 |
| 1 refrigerator..... | 35. 00 |
| 4 sterilizers, Arnold, copper..... | 60. 00 |
| 1 sterilizer, Arnold, tin (worn out)..... | 5. 00 |
| 1 still, automatic..... | 20. 00 |
| 30 straining jars, Coplin..... | 6. 00 |
| 1 sterilizer, dry wall..... | 40. 00 |
| 10 scapels, metal handles..... | 2. 50 |
| 48 scapels, wooden handles..... | 9. 60 |
| 6 scissors, small..... | 2. 40 |
| 2 shears..... | . 50 |
| 159 section lifters..... | 23. 35 |
| 12 $\frac{1}{2}$ gross slides, 3 by 1..... | 12. 50 |
| 2 syringes, Straus-Cohn 10..... | 6. 00 |
| 2 syringes, Straus-Cohn 5..... | 4. 00 |
| 60 slides, 3 by 1 cell..... | |
| 11 skimmers, agate..... | 2. 75 |
| 1 spoon, wooden..... | . 10 |
| 1 spoon, tin..... | . 10 |
| 4 supports, iron, medium..... | 3. 00 |
| 1 support, iron, large..... | 1. 00 |
| 173 slide boxes..... | 17. 30 |
| 1 screw-driver..... | . 10 |
| 5 saucepans, agate, 2 gallons..... | 5. 00 |
| 2 saucepans, agate, 3 quarts..... | 2. 50 |
| 2 scales..... | 5. 00 |
| 1 syringe, hypodermic..... | 1. 00 |
| 26 stools..... | 32. 50 |
| 5 spatulas..... | 1. 25 |
| 113 tumblers, glass..... | 5. 65 |
| 3 tripod rings, 4-inch..... | 4. 00 |
| 1 tripod ring, 5-inch..... | |
| 6 tripod rings, 7-inch..... | |
| 3 tripod rings, 10-inch..... | |
| 7 thermometers, clinical..... | 3. 50 |
| 21 thermometers, chemical..... | 7. 35 |
| 2 thermometers, incubator..... | 3. 00 |
| 94 tin cultures..... | |
| 74 test-tube supports, wood..... | 18. 50 |

| | |
|---|---------|
| 1 thermoregulator, Rorux, 10-inch..... | \$5. 00 |
| 1 thermoregulator, 18-inch..... | 6. 00 |
| Tubing, glass, $\frac{1}{8}$ -inch, $\frac{1}{4}$ -inch, $\frac{3}{8}$ -inch, $\frac{1}{2}$ -inch; rubber, $\frac{1}{4}$ -inch; rubber, chemical, $\frac{3}{8}$ -inch; rubber, chemical, $\frac{3}{8}$ -inch..... | 15. 00 |
| 2 thermoregulators, Bolke..... | 20. 00 |
| 1 histolog..... | |
| 4,773 test tubes, 15 by 15..... | 47. 73 |
| 576 test tubes, 15 by 28..... | 5. 76 |
| 869 test tubes, 6 m. by 48 m..... | 8. 69 |
| 1 urinometer..... | 1. 00 |
| 1 urinometer, Doremus Hind..... | 1. 00 |
| 12 watch glasses, 2..... | . 24 |
| 24 watch glasses, 3..... | . 48 |
| 48 watch glasses, 4..... | . 96 |
| 24 watch glasses, 6..... | . 48 |
| 27 wire baskets, round..... | 6. 75 |
| 12 wire baskets, square..... | 3. 00 |
| 11 wire baskets, small..... | 2. 75 |
| 1 weights, set..... | 5. 00 |

7, 101. 42

To this should be added collection of museum specimens which are used in connection with the teaching in pathology—315 specimen jars with contained specimens. These jars vary in size from 1 quart to several gallons. They are all provided with glass stoppers and contain specimens in alcohol or other fluid. The cost of such a collection is great but difficult to accurately estimate.

The collection of bacteria, pathological material, and material for use in the course in clinical microscopy is very extensive and complete, and, with a few exceptions, is sufficient in quantity to last for many years. It has been collected principally in Washington, but by means of exchanges with other colleges material from practically all parts of the world has been accumulated. It is impossible to place any money value upon this teaching collection, but it represents careful work by experienced men since the beginning of instruction in medicine in this university.

EXHIBIT H.

COLLEGE OF DENTISTRY.

Dr. CHARLES W. NEEDHAM,

DEAR SIR: In accordance with your request I have to report as follows regarding the dental department:

| | Square feet. |
|---|--------------|
| The floor space of the dental infirmary..... | 1, 560 |
| The floor space of the prosthetic laboratory..... | 558 |
| The floor space of the technic laboratory..... | 580 |

Lecture rooms are the same used by the medical department in the day and are used by this department in the evenings. These halls will accommodate five times the number of dental students attending at present session.

The dental infirmary has sufficient equipment to accommodate four times the present attendance; each laboratory will likewise give the same accommodation.

Infirmary equipment:

| | |
|-----------------------------|-------|
| 6 Columbia chairs..... | \$600 |
| 4 Harvard B chairs..... | 400 |
| 5 Wilkerson chairs..... | 225 |
| 36 lockers..... | 125 |
| 30 laboratory benches..... | 100 |
| 24 lathes..... | 30 |
| 5 lathes..... | 25 |
| 2 electric motors..... | 75 |
| 10 vulcanizers..... | 130 |
| 12 operating tables..... | 30 |
| 1 nitrous oxide outfit..... | 20 |

1, 760

Students enrolled: First year, 18 and 14 in attendance; second year, 5 and 5 in attendance; third year, 6 and 6 in attendance. One special student doing review work.

In reference to the reports of the anatomical, physiological, chemical, histological, bacteriological, and pathological laboratories, I respectfully refer you to the reports of these laboratories reported by the medical department.

Yours, respectfully,

J. ROLAND WALTON.

EXHIBIT I.

LIBRARY.

MAY 10, 1910.

CHARLES W. NEEDHAM, LL.D., *President*

The George Washington University, Washington, D. C.

DEAR MR. PRESIDENT: I have the honor to submit herewith my report on the library of The George Washington University:

The university library comprises the medical library, the law library, and the library of the department of arts and sciences.

The medical library contains 2,561 volumes of first copy books and about 1,500 duplicates. It is housed in the large southeast room on the upper floor of the medical building, is well lighted, and provided with tables and chairs.

The law library contains 5,220 volumes and occupies the large main room on the upper floor of the law building. It is well supplied with tables and chairs. Conversation and discussion are restricted to the adjoining lobby room.

The library of the department of arts and sciences contains 34,584 volumes and pamphlets—exclusive of the old books on religion and theology, numbering 1,500, and duplicates, numbering 1,200, or counting all 37,284 volumes. This library comprises the main or central library, the Mount Vernon alcove of the college of the political sciences, and the divisional collections of the college of engineering and mechanic arts, the teachers' college, and the division of architecture.

The main library is housed in the university building, occupying five rooms: The stack; the reading room, containing the leading reference books; the president's reception room, containing chiefly serial publications and sets of periodicals; the hall room, containing mainly the old books on religion and theology; and the stage room, in which are shelved principally duplicates and books not in use. Besides, the literature on botany and biology is shelved in the biological room, and that on geology, numbering 750 books and charts, in the geological room, both on the main upper floor of the university building.

The Mount Vernon alcove occupies three rooms, practically the entire first floor of the college of the political sciences, 819 Fifteenth street. It contains 3,411 volumes exclusive of pamphlets, distributed as follows: Political science and history, economics and sociology, 1,281 volumes. The front room, well equipped with tables and chairs, is used for reading and study.

The divisional collection of the college of engineering occupies the large front room on the second story of the first of the I street buildings, and contains 777 books, and 150 unbound, more or less complete, volumes of engineering magazines. This room is provided also with a large central table having a periodical rack.

The divisional collection of the teachers' college occupies the rear room on the first floor of the building and contains 642 books and 175 pamphlets on education, philosophy, psychology, and ethics. The room is well provided with tables and chairs.

The divisional collection of the division of architecture occupies an alcove room adjoining the dean's office on the first floor of the architectural building. It contains 75 books and folios of plates and drawings.

The university library contains, therefore, 42,365 volumes and pamphlets, or counting in the old books on religion and theology and the duplicates, 45,064 volumes and pamphlets.

Naturally in a library that has existed for more than eighty years one expects to find some old and useless material. But I am pleased to be able to emphasize the fact that in our university library there is relatively less of such material than would at first appear, for the reason that, after all, our library did not begin to develop until six or seven years ago. At that time there were not more than 10,000 volumes all told. The accessions since then, with the exception of the Heinzel and Wachsmuth collections and gifts, have been in the main such standard treatises and texts as were

recommended by the professors themselves for the use of their students in connection with the regular class-room work.

As to valuable books, there are many both in the Heinzel library on Germanic literature and philology, and the Wachsmuth library on classical history and archæology, and among the old stock that had accumulated prior to the reorganization of the library in the fall of 1906.

With reference to the money value of the library, no volume by volume inventory has as yet been undertaken, but on the basis of the annual library appropriation and the purchasing value of the two special collections acquired, the university library represents an outlay of about \$35,000. This does not, of course, include the value of the gifts, which have been very considerable during the past five years, and may be estimated at \$2,000.

In conclusion, my dear Mr. President, I desire to take advantage of this opportunity to thank you for your kindly and helpful interest in the development of the library. It could not possibly have attained its present efficiency without your sympathetic cooperation.

Most respectfully submitted.

ALFRED F. W. SCHMIDT,
Librarian.

EXHIBIT J.

General equipment.

Furniture and equipment used in administration and teaching:

| | |
|---|--------------|
| Furniture and equipment in the offices of the president, secretary, and treasurer | \$1, 503. 00 |
| Furniture and equipment in the libraries..... | 3, 679. 50 |
| Furniture and equipment in the dean's offices..... | 1, 418. 00 |
| Furniture and equipment in lecture halls, class rooms, and laboratories..... | 10, 941. 00 |
| Total..... | 17, 541. 50 |

EXHIBIT K.

Class enrollment for the past three years in each subject taught in the departments of engineering, architecture, veterinary medicine, and pharmacy.

| Class. | 1907-8. | 1908-9. | 1909-10. |
|--|---------|---------|----------|
| College of Engineering: | | | |
| Civil engineering course..... | 59 | 63 | 73 |
| Electrical engineering course..... | 35 | 46 | 33 |
| Mechanical engineering course..... | 19 | 29 | 31 |
| Special..... | 37 | 53 | 43 |
| | 150 | 191 | 180 |
| Class enrollments in technical engineering subjects: | | | |
| Civil engineering..... | 45 | 35 | 51 |
| Electrical engineering..... | 17 | 32 | 29 |
| Mechanical engineering..... | 31 | 30 | 31 |
| Mechanical drawing..... | 43 | 67 | 62 |
| Other courses in drawing..... | 29 | 32 | 38 |
| Machine design..... | 3 | 2 | 1 |
| Shop work..... | 5 | 4 | 7 |
| Applied mathematics..... | 30 | 16 | 24 |
| Division of architecture: | | | |
| Free-hand drawing..... | 36 | 36 | 46 |
| Architectural drawing and elementary design..... | 23 | 24 | 30 |
| Shades, shadows, and perspective..... | 10 | 12 | 14 |
| Rendering and design..... | 12 | 10 | 17 |
| History of architecture..... | 20 | 19 | 31 |
| History of sculpture and painting..... | 8 | 8 | 12 |
| Design and sketch design (advanced)..... | 18 | 18 | 20 |
| Building construction..... | 24 | 33 | 36 |
| Water-color drawing and rendering..... | 14 | 13 | 24 |

| Class. | 1907-8. | 1908-9. | 1909-10. |
|---|---------|---------|----------|
| College of veterinary medicine: ^a | | | |
| First year subjects— | | | |
| Anatomy..... | | 30 | 17 |
| Chemistry..... | | 30 | 17 |
| Histology..... | | 30 | 17 |
| Embryology..... | | 30 | 17 |
| Materia medica..... | | 30 | 17 |
| Pharmacy..... | | 30 | 17 |
| Horseshoeing..... | | 30 | 17 |
| Clinics..... | | 30 | 17 |
| Second year subjects— | | | |
| Biochemistry..... | | | 28 |
| Bacteriology..... | | | 28 |
| Pathology..... | | | 28 |
| Physiology..... | | | 28 |
| Canine medicine..... | | | 28 |
| Theory and practice of veterinary medicine..... | | | 28 |
| Surgery..... | | | 28 |
| Zootechnics..... | | | 28 |
| Clinics..... | | | 28 |
| College of pharmacy: | | | |
| Pharmacy..... | 58 | 62 | 76 |
| Materia medica..... | 58 | 62 | 72 |
| General and analytical chemistry..... | 58 | 62 | 75 |
| Microscopy..... | 32 | 39 | 45 |
| Mercantile pharmacy..... | 10 | 13 | 17 |
| Pharmaceutical jurisprudence..... | 10 | 13 | 17 |

^a The college of veterinary medicine was organized and commenced teaching October 1, 1908. The course comprises three years of study.

EXHIBIT L.

Class enrollment in other subjects under the Morrill acts (see circular letter of the Department of the Interior, Bureau of Education, November 26, 1900), taken by students in agriculture and the mechanic arts, not included in Exhibit K. Some of the students in these subjects are in the college of liberal arts.

| Subject. | 1907-8. | 1908-9. | 1909-10. |
|---|---------|---------|----------|
| Instruction in English language: | | | |
| English language..... | 4 | 4 | 5 |
| English literature..... | 72 | 113 | 122 |
| Composition and rhetoric..... | 111 | 160 | 143 |
| Instruction in mathematical sciences: | | | |
| Mathematics..... | 169 | 223 | 174 |
| Astronomy..... | 7 | 7 | 11 |
| Instruction in natural and physical sciences: | | | |
| Chemistry, including metallurgy..... | 316 | 497 | 509 |
| Physics..... | 39 | 60 | 75 |
| Biology..... | | 12 | |
| Botany..... | 5 | 2 | |
| Zoology..... | 5 | 3 | 19 |
| Geology and mineralogy..... | 41 | 38 | 52 |
| Physiology..... | 22 | 47 | 12 |
| Bacteriology..... | 40 | 18 | 38 |
| Instruction in economic sciences: | | | |
| Political economy..... | 42 | 60 | 48 |
| Commercial geography..... | 5 | 16 | 19 |

EXHIBIT M.

Salaries, department of engineering and mechanic arts, 1909-10.

| | |
|---|-------|
| Hodgkins, H. L., dean..... | \$500 |
| Hodgkins, H. L., professor of mathematics..... | 2,200 |
| Betts, Philander, assistant professor electrical engineering..... | 1,400 |
| Dunstan, E. V., assistant professor civil engineering..... | 1,400 |
| Mechlin, O. A., assistant professor civil engineering..... | 1,200 |
| Mortimer, C. W., instructor in electrical engineering..... | 1,200 |
| Starr, F. C., instructor in civil engineering..... | 1,200 |
| Varney, E. W., instructor in physics..... | 200 |
| Willard, C. F., instructor in mechanical engineering..... | 300 |
| | 9,600 |

EXHIBIT N.

Salaries, division of architects, 1909-10.

| | |
|--|----------|
| Bibb, A. B., acting dean and professor..... | \$2, 000 |
| Harris, A. A., student assistant..... | 22 |
| Murphy, F. V., instructor in architecture..... | 250 |
| Smith, D. H., instructor in architecture..... | 120 |
| | <hr/> |
| | 2, 392 |

EXHIBIT O.

Salaries, college of veterinary medicine, 1909-10.

There are no stated salaries in this college, compensation being arranged on the basis of the distribution of the net profit, if any. Students in veterinary medicine take certain laboratory work under professors in the medical department, the professors in the medical department being allowed extra compensation for such instruction.

EXHIBIT P.

Salaries, college of pharmacy, 1909-10.

| | |
|--|--------|
| Kalusowski, H. E., dean and professor of pharmacy..... | \$600 |
| Hillebrand, W. F., professor of general chemistry..... | 450 |
| Holton, F. A., professor of analytical chemistry..... | 450 |
| Waggaman, Samuel, professor of materia medica..... | 450 |
| Howard, D. J., professor of microscopy..... | 300 |
| Bradbury, H. M., assistant professor of chemistry..... | 175 |
| Grady, W. J., assistant professor of pharmacy..... | 60 |
| Judd, B., assistant professor of pharmacy..... | 40 |
| Muncaster, Alexander, professor of jurisprudence..... | 50 |
| Floyd, H. D., professor of mercantile pharmacy..... | 50 |
| | <hr/> |
| | 2, 625 |

EXHIBIT Q.

Salaries arts and sciences, 1909-10.

| | |
|---|---------|
| Wilbur, William A., dean..... | \$500 |
| Wilbur, William A., professor of English..... | 2, 500 |
| Bassler, R. S., instructor in geology..... | 300 |
| Carroll, Mitchell, professor of classical languages..... | 1, 400 |
| Croissant, D. C., assistant professor of English..... | 1, 200 |
| Ellis, H. S., dean of women..... | 600 |
| Henning, G. N., professor of romance languages..... | 2, 200 |
| Hill, E. A., assistant professor in history..... | 400 |
| Hodgkins, H. L., professor of physics..... | 300 |
| Ingersoll, E. H., student assistant in chemistry..... | 55 |
| Macmillan, Julia, assistant in zoology..... | 200 |
| Merrill, G. P., professor of geology and mineralogy..... | 400 |
| Peake, J. F., assistant professor in history..... | 1, 200 |
| Peck, P. N., assistant professor in mathematics..... | 1, 200 |
| Price, Thomas M., assistant professor in chemistry..... | 300 |
| Schmidt, A. F. W., assistant professor in German..... | 800 |
| Schoenfeld, H., professor of German..... | 2, 200 |
| Smith, C. S., assistant professor in Greek and Latin..... | 1, 100 |
| Sniffen, T. W., assistant in romance languages..... | 300 |
| Swett, O. D., assistant professor of chemistry..... | 1, 500 |
| Swisher, C. C., professor of history..... | 2, 000 |
| Tucker, P. S., student assistant in chemistry..... | 215 |
| | <hr/> |
| | 20, 870 |

EXHIBIT R.

Salaries, college of the political sciences, 1909-10.

| | |
|---|---------|
| McBain, H. L., dean..... | \$300 |
| McBain, H. L., assistant professor..... | 1, 500 |
| Black, B., clerk..... | 360 |
| Charlton, Paul, lecturer..... | 250 |
| Harlan, John M., professor..... | 600 |
| Kern, R. R., instructor in economics..... | 1, 200 |
| Latimer, J. W., instructor in common law..... | 500 |
| Manning, W. R., assistant professor, history..... | 1, 600 |
| Osborne, J. B., lecturer..... | 500 |
| Scott, J. B., professor international law..... | 2, 000 |
| *Snow, A. H., lecturer..... | 250 |
| Stowell, E. C., instructor, consular science..... | 1, 100 |
| Swisher, C. C., professor of history..... | 300 |
| Willis, H. P., professor of finance..... | 1, 200 |
| | <hr/> |
| | 11, 660 |

EXHIBIT S.

Salaries, teachers' college, 1909-10.

| | |
|--|--------|
| Hough, W. S., dean..... | \$100 |
| Hough, W. S., professor of philosophy..... | 2, 200 |
| Kramer, S. E., lecturer..... | 100 |
| Myers, G. E., lecturer..... | 300 |
| Ruediger, W. C., assistant professor educational psychology..... | 1, 800 |
| Small, W. S., lecturer..... | 300 |
| | <hr/> |
| | 4, 800 |

EXHIBIT T.

Salaries, medicine, 1909-10.

| | |
|---|--------|
| Borden, W. C., dean..... | \$100 |
| Borden, W. C., professor of surgery..... | 900 |
| Acker, G. N., professor of pediatrics and clinical medicine..... | 50 |
| Bovee, J. W., professor of gynecology..... | 100 |
| Brandenburg, W. R., demonstrator..... | 100 |
| Butler, W. K., professor of ophthalmology..... | 50 |
| Cabell, J. M., assistant professor of obstetrics..... | 50 |
| Claytor, T. A., professor materia medica and therapeutics..... | 100 |
| Copeland, E. P., assistant clinical professor of pediatrics..... | 50 |
| Donnally, H. H., assistant professor of bacteriology and pathology..... | 50 |
| Eisenberg, A. A., student assistant in histology..... | 75 |
| Elliott, H. H., instructor in physiology..... | 50 |
| Franz, S. I., professor of physiology..... | 1, 000 |
| Fremont-Smith, F., clinical instructor in medicine..... | 50 |
| Irmen, F. A., student assistant in bacteriological laboratory..... | 75 |
| Jennier, Frank, janitor in bacteriological laboratory..... | 360 |
| King, A. F. A., professor of obstetrics..... | 100 |
| Lawson, H. W., professor of histology and embryology..... | 300 |
| Medford, H. S., instructor in obstetrics..... | 50 |
| Miller, G. B., instructor in gynecology..... | 50 |
| Morse, E. E., assistant professor of obstetrics..... | 50 |
| Phelps, I. K., assistant professor of chemistry..... | 1, 200 |
| Prentiss, D. W., professor of histology..... | 50 |
| Reichelderfer, L. H., assistant clinical professor of surgery..... | 50 |
| Richardson, C. W., professor of laryngology and otology..... | 50 |
| Ruffin, Sterling, professor of theory and practice..... | 100 |
| Russell, F. F., professor of bacteriology and pathology..... | 1, 200 |
| Seibert, E. G., assistant in chemistry and ophthalmology..... | 100 |
| Sellner, A. E., clerk..... | 420 |

*Resigned January 29, 1910.

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| Shands, A. R., professor of orthopedic surgery..... | \$50 |
| Shute, D. K., professor of anatomy..... | 100 |
| Sowers, W. F. M., assistant professor of surgery..... | 50 |
| Thompson, J. L., instructor in surgery..... | 50 |
| Wellington, J. R., clinical professor of surgery..... | 100 |
| White, W. A., professor of mental diseases..... | 50 |
| Wilkinson, W. W., assistant in chemistry..... | 225 |
| Woodward, W. C., professor of medical jurisprudence..... | 50 |
| Yarrow, H. C., professor of dermatology..... | 50 |

7,605

EXHIBIT U.

Salaries, dentistry, 1909-10.

| | |
|--|------|
| Barnes, Noble, professor materia medica..... | \$75 |
| Bassett, C. T., in charge of infirmary..... | 500 |
| Calver, G. W., student assistant chemical laboratory..... | 75 |
| DeFarges, J. R., assistant professor metallurgy..... | 50 |
| Franz, S. I., professor of physiology..... | 200 |
| Gartrell, Julian, no compensation..... | |
| Hopkins, H. C., instructor operative technics..... | 50 |
| Lawrence, W. F., assistant professor prosthetic technics..... | 75 |
| Lawson, H. W., professor histology and embryology..... | 100 |
| Luckett, Geo. S., student assistant chemical laboratory..... | 75 |
| Odor, C. L., assistant professor operative technics..... | 75 |
| Owen, W. O., professor of anatomy..... | 100 |
| Seibert, E. G., professor of chemistry..... | 100 |
| Sellner, A. E., clerk..... | 120 |
| Shoemaker, C. P., instructor orthodontia technics..... | 50 |
| Taylor, J. W., instructor prosthetic technics..... | 50 |
| Thompson, H. C., professor operative technics..... | 400 |
| Walton, J. R., dean..... | 200 |
| Walton, J. R., professor prosthetic dentistry and orthodontia..... | 400 |
| White, C. S., professor oral surgery..... | 75 |
| Wolfe, A. S., assistant professor crown, bridge, and porcelain work..... | 75 |
| Young, H. C., instructor prosthetic technics..... | 50 |

2,895

EXHIBIT V.

Salaries, graduate studies, 1909-10.

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| Munroe, Charles E., dean..... | \$500 |
| Munroe, Charles E., professor of chemistry..... | 2,800 |
| Price, Thomas M., assistant professor of chemistry..... | 300 |
| Abbott, H. L., professor hydraulic engineering..... | } a 680 |
| Bartsch, Paul, professor of zoology..... | |
| Bigelow, F. H., professor of astro-physics..... | |
| Buckingham, E., lecturer in thermodynamics..... | |
| Clarke, F. W., professor mineral chemistry..... | |
| Cohen, Louis, assistant professor mathematics..... | |
| Fowle, F. E., lecturer in astro-physics..... | |
| Frisby, E., professor astronomy..... | |
| Hall, A., professor astronomy..... | |
| Hopkins, N. M., assistant professor of chemistry..... | |
| Mann, A., professor of botany..... | |
| Merrill, G. P., professor geology and mineralogy..... | |
| Nutting, P. G., assistant professor physics..... | |
| Rosa, E. B., professor of physics..... | |
| Stanton, T. W., assistant professor of paleontology..... | |
| Sternberg, G. M., professor preventive medicine..... | |
| Wiley, H. W., professor agricultural chemistry..... | |

4,280

^a Compensation on a basis of \$40 per assigned student.



EXHIBIT W.

Salaries, library, 1909-10.

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| Bowen, N. L., librarian, C. P. S..... | \$65. 00 |
| Dutton, D. L., assistant librarian, A. and S..... | 90. 00 |
| Gilliss, Helen, assistant librarian, teachers..... | 75. 00 |
| Jones, Eleanor, assistant librarian, A. and S..... | 60. 00 |
| Matthews, M. Alice, assistant librarian, A. and S..... | 900. 00 |
| Schmidt, A. F. W., librarian..... | 1, 000. 00 |
| Sloat, J. I., assistant librarian, medicine..... | 75. 00 |
| Smith, A. C., librarian, medicine..... | 75. 00 |
| Tilton, Rufus, librarian, law..... | 270. 00 |
| Yancy, C. L., librarian, law..... | 260. 00 |
| | <hr/> |
| | 2, 870. 00 |

EXHIBIT X.

LABORATORY CHARGES.

College of engineering and mechanic arts, and architecture.

[University Catalogue, 1908-9, p. 118.]

Material fees:

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|---|---------|
| Mineralogy, botany, and zoology, each..... | \$5. 00 |
| Chemistry 2, 3, and 7; electrical engineering, physics, each..... | 10. 00 |
| Chemistry 4 (assaying)..... | 20. 00 |
| Chemistry, except 2, 3, 4, and 7, each..... | 25. 00 |

Deposits to cover breakage of apparatus issued, the amount paid in excess of breakage to be returned:

| | |
|---|--------|
| Chemistry, 2, 3, and 7, each..... | 10. 00 |
| Chemistry, except 2, 3, 4, and 7, each..... | 25. 00 |

College of veterinary medicine.

| | |
|---------------------------------|--------|
| Histology..... | 8. 50 |
| Inorganic chemistry..... | 6. 50 |
| Organic chemistry..... | 6. 25 |
| Physiology..... | 15. 00 |
| Bacteriology and pathology..... | 19. 00 |

National college of pharmacy.

No special charge is made for laboratory fees.

The charge for materials is included in the tuition fee.